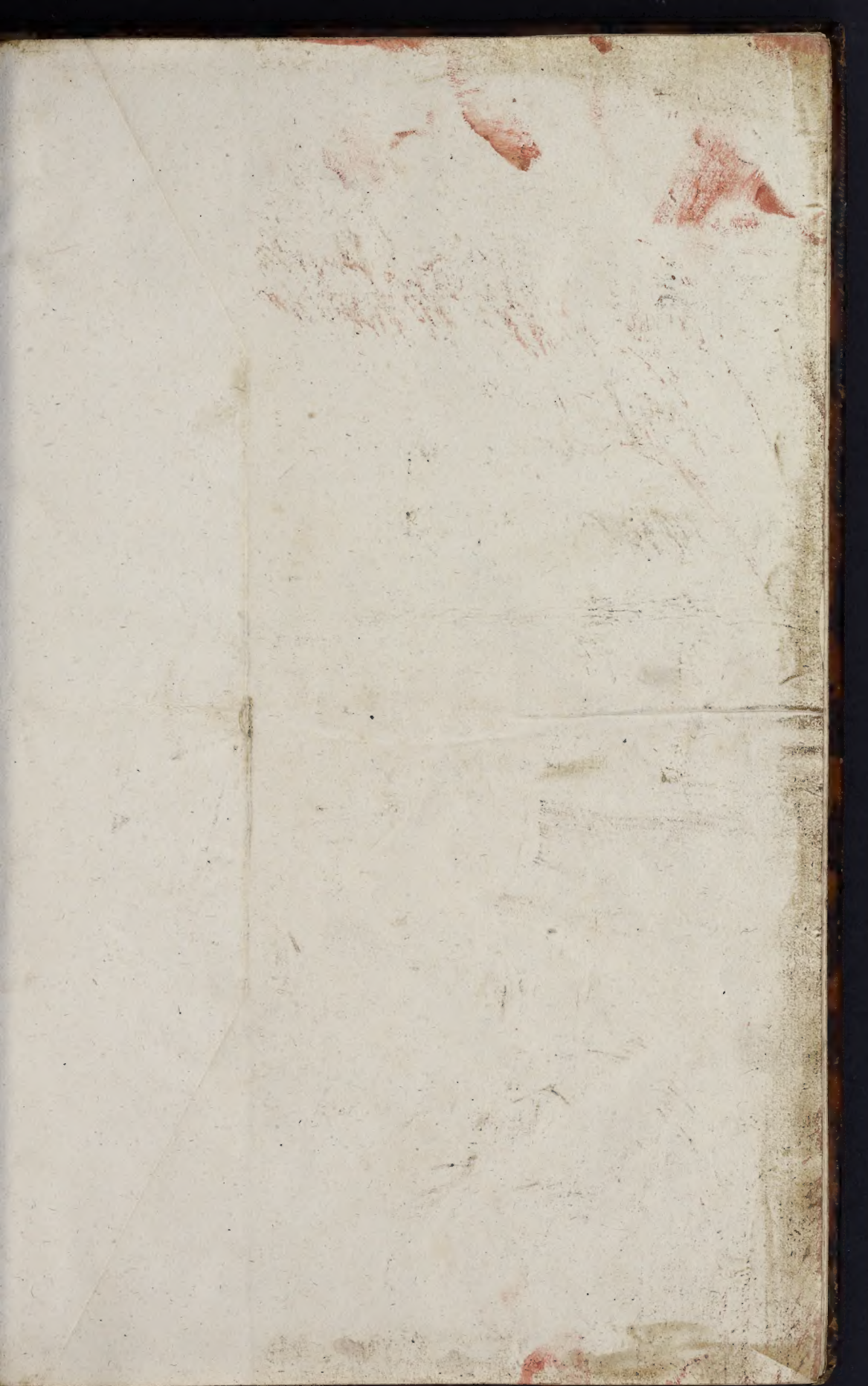
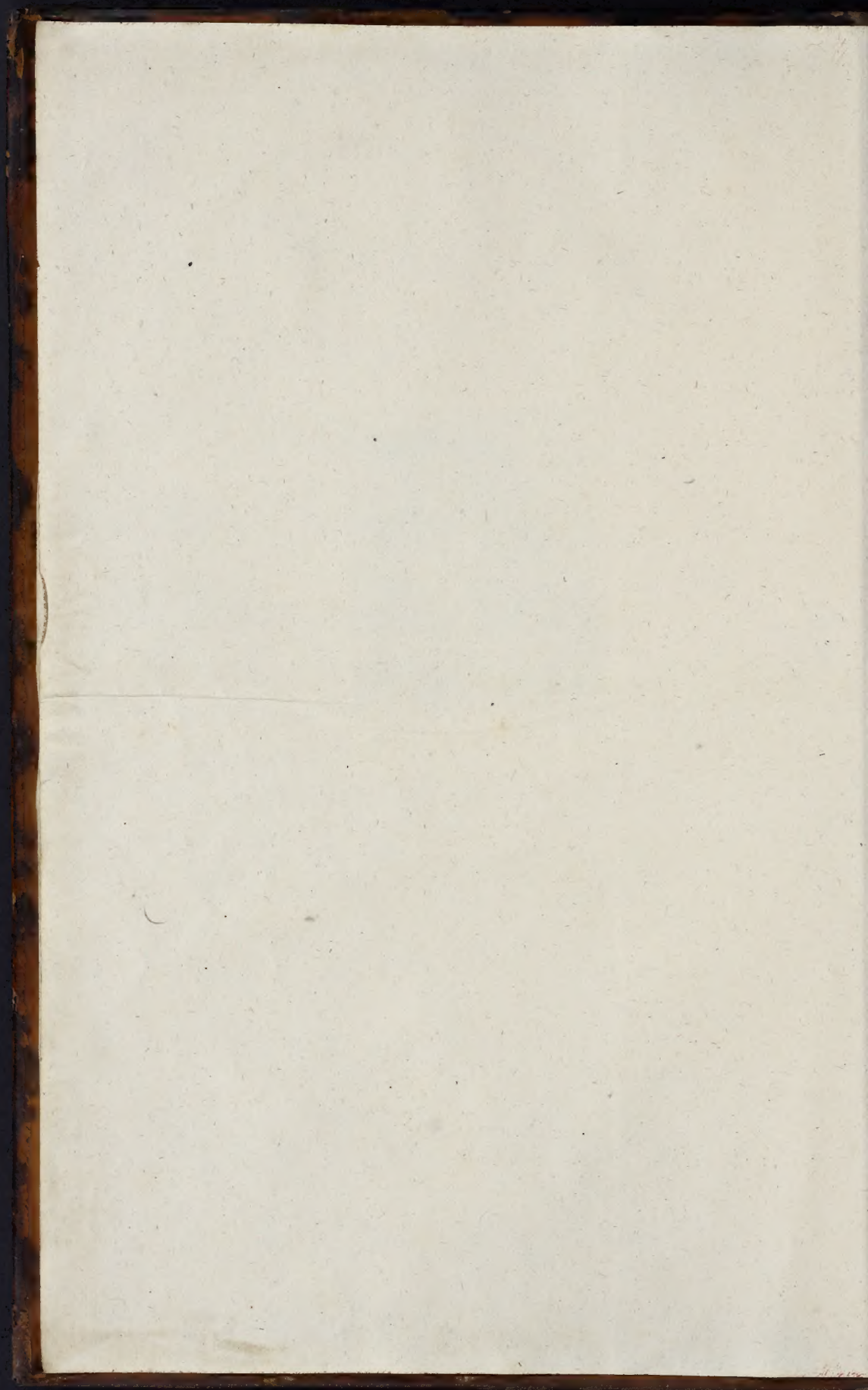
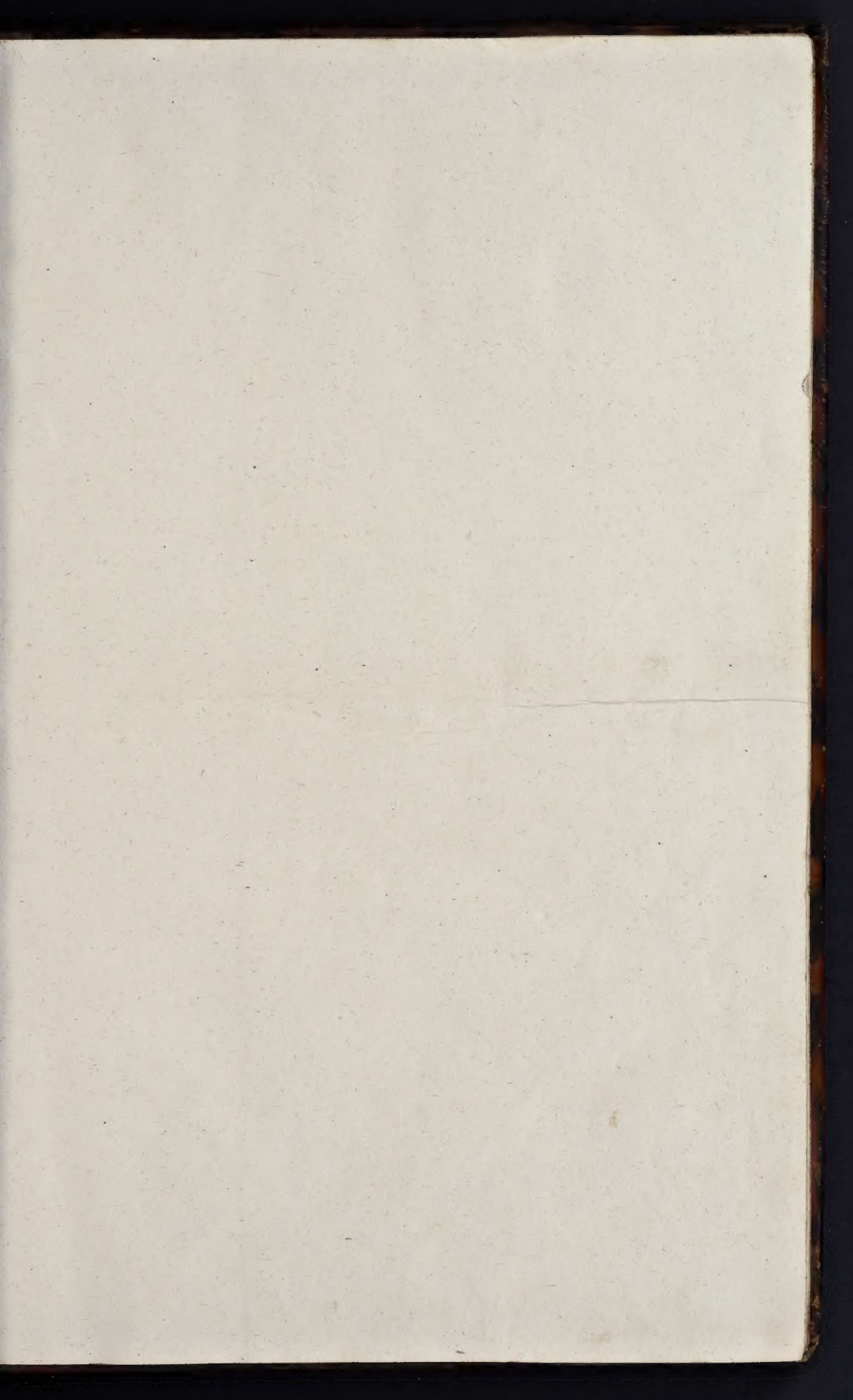


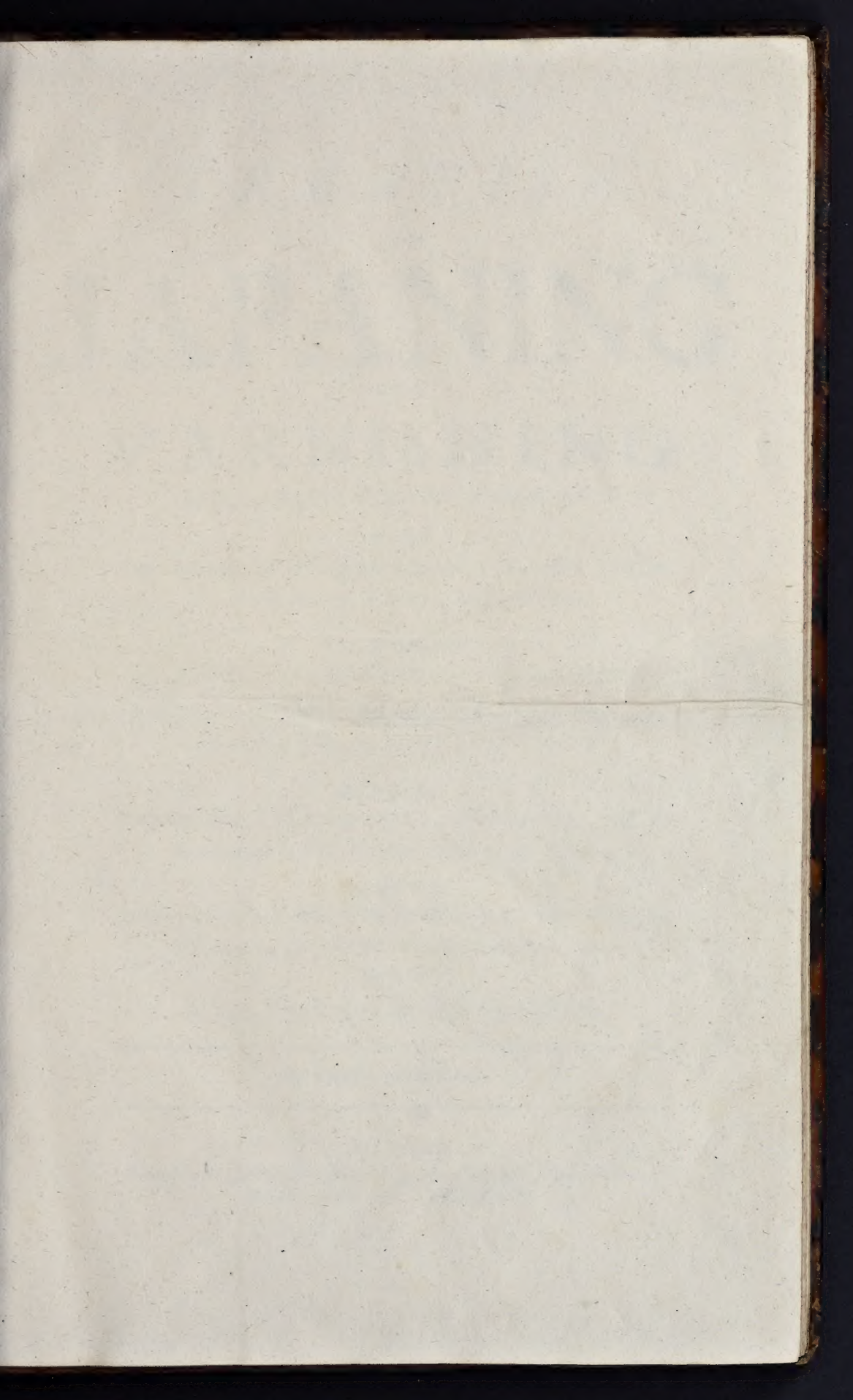
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A
T R E A T I S E
OF
J A P A N I N G
AND
V A R N I S H I N G,

Being a compleat Discovery of those ARTS.

WITH
The best way of making all sorts of V A R N I S H for
J A P A N, W O O D, P R I N T S, or P I C T U R E S.

The Method of
G U I L D I N G, B U R N I S H I N G, and L A C K E R I N G,
with the Art of Guilding, Separating, and Refining METALS:
and of Painting MEZZO-TINTO - P R I N T S.

Also Rules for
Counterfeiting T O R T O I S E - S H E L L, and M A R B L E, and for
Staining or Dying W O O D, I V O R Y, and H O R N.

Together with
Above an Hundred distinct Patterns for J A P A N - w o r k, in
Imitation of the I N D I A N S, for Tables, Stands, Frames, Cabinets,
Boxes, &c.

Curiously Engraven on 24 large Copper-Plates.

By J O H N S T A L K E R.

O X F O R D,
Printed for, and sold by the Author, living at the Golden Ball in James's Market,
London. in the Year MDCLXXXVIII, a;

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A
THE ARTIST
OF
JAPANESE
AND
VARNISHING

Being a complete Dictionary of those Arts
WITH
The best way of making all sorts of VARNISHES for
JAPANESE PAINTS OF PICTURES
The Method of
GUILDING, BURNISHING, and LACKERING
with the Art of Gilding, Separating, and Refining METALS
and of Painting MIXED TINTS - PICTURES
All the Arts for
Counterfeiting TORTOISE-SHELL, and MARBLES, and for
Staining or Dying WOOD, IVORY, and HORN
Tinted with
Above an Hundred different Patterns for JAPANESE WORK, in
Imitation of the INDIVIDUALS for Tables, Screens, Fans, &c.
&c.
Curious Engravings on a large Copper-Plate.

By JOHN STURGEON

OXFORD

Printed for, and sold by the Author, living at the Golden Ball in Jewry, Strand,
London, in the Year MDCCLXXXVIII.

TO THE
RIGHT HONOURABLE
And most ACCOMPLISH'D
Lady MARY JERMAN.

MADAM,

THough it may appear Presumptuous for so mean an Author, to Dedicate a Treatise that is so far from being Faultless, as this of mine is; to a Person of so High a Quality, and such an Exact Judgement as Your Ladiship: Yet those very Considerations that argue this Dedication to be Presumptuous, do at the same time justify it, because they prove it to be Necessary. (And I doubt not, but a Person of Your Ladiships Goodness, and Condescension, looks upon Necessity, as sufficient to justify an Action of this Nature; that might otherwise justly be reputed a Crime.) For the meaner the Author be, and the less perfect the Treatise, the greater necessity for a Powerful Protection, under the shelter of an Eminent Patronage. And how can such a Book as this, that has nothing to recommend it, but the usefulness, and truth of the Experiments it contains, be better secured, against the Censures of this our Critical Age we live in, then by the Patronage of a Lady, that is no less Eminent for her Quality, Beauty, and Vertue, then for her Incomparable Skill and Experience in the Arts that those Experiments belong to, as well as in several others: For I know Your Ladiships Candor, Exactness, and Judgment to be such, that if You find the matter of the Book, to be useful, and to answer the test of Experience, You will easily over-look any Imperfections, that rigid Criticks, may Censure in the manner of proposing it; All which Encourages me to hope for a Gracious Acceptance of this small present, which is offer'd to Your Ladiship with the greatest sincerity, and most profound respect, by

MADAM,

Your Ladiships most Humble,

and most Obedient Servant

JOHN STALKER.

THE HISTORY OF THE CITY OF LONDON

The City of London is one of the most ancient and famous cities in the world. It was founded by the Romans, who called it Londinium. The name of London is derived from the word Londin, which signifies a river. The River Thames, which flows through the city, is the source of its name. The city was built on a small island in the river, and it grew to be one of the most important cities in the world. It was the seat of the British Empire, and it was the center of the world's commerce. The city was destroyed by fire in 1666, but it was rebuilt and it became even more important than before. The city is now one of the most important cities in the world, and it is the center of the world's commerce.

By John Smith

and John Doe

John Doe

THE PREFACE.

*To the Admirers of the Noble Arts of PAINTING,
JAPANNING, GUILDING, &c.*

IF the Antiquity of an Art can advance its credit and reputation, this of the Pencil may justly claim it; for although we cannot trace it from its Original, yet we find many valuable Pieces extant in time of Alexander the Great. The Grecians (who always encouraged Learning and Ingenuity) had so great an honour for this Art, that they ordained, That Gentlemens Sons and Freeborn should be first sent to a Painting-School, to learn the way to Paint and Draw Pictures, before they were instructed in any other thing; Slaves and vulgar hands, by a perpetual Edict, were excluded from the benefit and practice of it: And lastly, it was enacted, That the Art it self should be ranged in the first degree of Liberal Sciences: After them the Romans entertainen it with great respect and veneration; and the Jews, though denied this Profession by their Law, were not wholly destitute of Artists; for St. Luke (if Tradition may be credited) was a Painter, as well as Evangelist and Physician, and for that reason we honour and respect him as our Patron and Protector.

The Civilized of all Ages have given it a kind and most obliging reception: Candaules King of Lydia purchased a Table, whereon the Battel of Magnetes was painted with excellent skill, for its weight in Gold; and King Demetrius, forbore taking the City of Rhodes, lest in the fire and plunder of his souldiers he should have lost a Picture, which he prized beyond the Conquest of the Town. Indeed, they are so highly valued by us, that we think them fit ornaments for our Churches and Altars. The Hollanders reckon their Estates and Worth by their pieces of Painting, and Pictures with them are ready and current money: in these too they discover their ingenuity, for you shall rarely meet with a Dutch-joke, but in Picture. Some Femals have also been well pleased with this Art, which they imagin can heighten and preserve their beauties; Jezebels, who prefer Art to Nature, and a fordid Fucus to a native complexion; and tis so familiar to meet with these walking Pictures, that unless we are very circumspect, we may be imposed upon with Ixion's fallacy, who embraced a Painted vapour for a Goddess. Painting will certainly make us survive our selves, and render the shadow more lasting than the substance, when the colours are laid in the right place, and by the Painters hand.

Begging the Muses pardon, I should prefer a Picture to a Poem; for the latter is narrow and short-liv'd, calculated to the Meridian of two or three Countries, and perhaps as many Ages; but Painting is drawn in a character intelligible to all Mankind, and stands not in need of a Gloss, or Commentator, tis an unchangeable and

The Preface.

universal language. Painting can decipher those mystical characters of our Faces, which carry in them the Motto's of our Souls, whereby our very Natures are made legible. This comely part is the Limners more peculiar Province; and if the beauty and proportion of it can excite our love and admiration, what regard and esteem must we reserve for him, who can so excellently describe both. The Rarities of this Art were never yet so common, as to make them despicable; for the world very seldom produced above one famous Artisan at a time; this Age brought forth a Zeuxis, that an Apelles, and the third an Angelo, as if a particular sprightly Genius was required, and they were to rise from the Phœnix-ashes of each other, or that Men were to be born Painters as well as Poets.

If we duly weigh the merits of the Pencil, we shall find the deference and respect which our Predecessors paid to the Masters of it, was most just and reasonable; and that we our selves ought not to be wanting in gratitude and address. By the Painters assistance, we enjoy our absent friends, and behold our deceased Ancestors face to face: He it is, that stretches out our Eighty to eight Hundred years, and equals our Age to that of our Forefathers. The Egyptian Pyramids and embalming Spices of Arabia, were not sufficient to rescue the Carcass from corruption or decay; and 'twas a grand mistake, to suppose the Ashes of one body could be preserved by the dust of another: Painting only is able to keep us in our Youth and perfection; That Magick Art, more powerful than Medæa's charms, not only renews old age, but happily prevents grey hairs and wrinkles; and sometimes too, like Orpheus for Euridice, forces the shades to a surrender, and pleads exemption from the Grave. Mahomet's is truly the Painter's Paradise, for he alone can oblige with a Mistress for ever young and blooming, and a perpetual Spring is no where to be found but in his Landskip. In fine, what were the Heathen Gods but fancies of the Painter, all their Deities were his handywork, and Jove himself stole his boasted Immortality from him.

Well then, as Painting has made an honourable provision for our Bodies, so Japanning has taught us a method, no way inferior to it, for the splendor and preservation of our Furniture and Houses. These Buildings, like our Bodies, continually tending to ruin and dissolution, are still in want of fresh supplies and reparations: On the one hand they are assaulted with unexpected mischances, on the other with the injuries of time and weather; but the Art of Japanning has made them almost impregnable against both: no damp air, no mouldring worm, or corroding time, can possibly deface it; and, which is much more wonderful, although its ingredients, the Gums, are in their own nature inflammable, yet this most vigorously resists the fire, and is it self found to be incombustible. True, genuine Japan, like the Salamander, lives in the flames, and stands unalterable, when the wood which was imprison'd in it, is utterly consumed. Just so the Asbeston of the Ancients, the cloath in
which

The Preface.

which they wrapped the dead bodies, lay unchanged and entire on the Funeral Pile, and preserved the body, when reduced to ashes, from being mixt with common, and undistinguish'd dust. Not that tis only strong and durable, but delightful and ornamental beyond expression: What can be more surprizing, than to have our Chambers overlaid with Varnish more glossy and reflecting than polisht Marble? No amorous Nymph need entertain a Dialogue with her Glafs, or Narcissus retire to a Fountain, to survey his charming countenance, when the whole house is one entire Speculum. To this we subjoin the Golden Draught, with which Japan is so exquisitely adorned, than which nothing can be more beautiful, more rich, or Majestick: Let not the Europeans any longer flatter themselves with the empty notions of having surpass'd all the world beside in stately Palaces, costly Temples, and sumptuous Fabricks; Ancient and modern Rome must now give place: The glory of one Country, Japan alone, has exceeded in beauty and magnificence all the pride of the Vatican at this time, and the Pantheon heretofore; this last, as History informs us, was overlaid with pure Gold, and 'twas but proper and uniform to cloath the Gods and their Temples with the same metal. Is this so strange and remarkable? Japan can please you with a more noble prospect, not only whole Towns, but Cities too are there adorned with as rich a Covering; so bright and radiant are their Buildings, that when the Sun darts forth his lustre upon their Golden roofs, they enjoy a double day by the reflection of his beams. These delights would make us call to mind the fictions of the Poets, and persuade us that the Golden Age was still in being, or that Midas his Wish had at length succeeded. Surely ~~this~~ Province was Nature's Darling, and the Favourite of the Gods, for Jupiter has vouchsaf't it a Visit, as formerly to Danae, in a Golden shower.

The EPISTLE to the
READER and PRACITIONER.

WE have laid before you an Art very much admired by us; and all those who hold any commerce with the Inhabitants of JAPAN; but that Island not being able to furnish these parts with work of this kind, the English and Frenchmen have endeavour'd to imitate them; that by these means the Nobility and Gentry might be compleatly furnish'd with whole Sets of Japan-work, whereas otherwise they were forc'd to content themselves with perhaps a Screen, a Dressing-box, or Drinking-bowl, or some odd thing that had not a fellow to answer it: but now you may be stockt with entire Furniture, Tables, Stands, Boxes, and Looking-glass-frames, of one make and design, or what fashion you please; and if done by able Hands, it may come so near the true Japan, in fineness of Black, and neatness of Draught, that no one but an Artist should be able to distinguish 'em. 'Tis certain, that not only here, but in JAPAN too, there is a vast difference in work: we our selves have seen some that has been brought from thence, as mean and ordinary in Draught, (though the ground-work may be pretty good,) as you can possibly imagine: As for our Undertakers in this kind they are very numerous, and their works are different; some of them have more confidence than skill and ingenuity, and without modesty or a blush impose upon the Gentry such Stuff and Trash, for Japan-work, that whether tis a greater scandal to the Name or Artificer, I cannot determin. Might we advise such foolish pretenders, their time would be better employ'd in darning Whistles and Puppets for the Toy-Shops to please Children, than contriving Ornaments for a Room of State. 'Twill certainly please us to hear such Ignorants blame this our Publication of an Art, that was not understood by the world: tis unknown, we confess, even to them, and they themselves will find upon examination, that we have discover'd more than they ever knew or dream'd of, and in spite of all their Bravado's, will be behold'g to our Rules and Patterns: These Pages are so far from exposing our Art, that on the contrary it enhances and raises its esteem and value. These will assist 'em to distinguish between good Work and Rubbish, between an ignorant Knave and an Artist, and put a stop to all the cheats and consenage of those whiffing, impotent fellows, who pretend to teach young Ladies that Art, in which they themselves have need to be instructed, and to the disgrace of the Title lurk and shelter themselves under the notion of Japanners, Painters, Guilders, &c.

What we have deliver'd in this Treatise, we took not upon Trust or Hearsay, but by our own personal knowledge and experience do promise and aver, that if you punctually observe them, you must of necessity succeed well; and if any Gentlemen or Ladies, having met with disappointments in some of the Receipts, do question the truth and reality of them, they may for their satisfaction (if it stands with their convenience) see them tried by the Author, according to the very Rules set down; who is in this, and all other Commands, their most ready and most humble Servant.

In the Cutts or Patterns at the end of the Book, we have exactly imitated their Buildings, Towers and Steeples, Figures, Rocks, and the like, according to the Patterns which the best workmen amongst them have afforded us on their Cabinets, Screens, Boxes, &c. Perhaps we have helpt them a little in their proportions, where they were lame or defective, and made them more pleasant, yet altogether as Antick. Had we industriously contriv'd perspective, or shadow'd them otherwise than they are; we should have wandred from our Design, which is only to imitate the true genuine Indian work, and perhaps in a great measure might puzzle and confound the unexperienced Practitioner.

We know nothing farther that wants an Apology or Explanation; but to these our Endeavours do subjoin our hearty Wishes for your happy Progress and Success, and Subscribe,

YOURS.

ERRATA.

In the Preface, page 1. line 4. for in time, read, in the time. l. 20. for Magnetes, read, the Magnetes l. 28. for, better joke, read, better Dutch joke l. ult. tis unchangeable, read, for tis unchangeable.

In the Book, Page 5. line 26. for, silver, read, silver-dust. p. 7. l. 25. for Smalt, read Lake l. 45. for Sea-green; read fine Smalt, and for, Greens, read, Blews. p. 25. l. 32. for, Müller or; read Müller and p. 29. l. 47. for, Venice Turpentine, read, oyl of Turpentine. l. ult. for Turpentine, read, Turpentine-oyl p. 36. after line the 27. read CHAP. XIII. p. 60. l. 9. for, narrow, read, many p. 77. l. 16. for red, r. brown-red. l. 16. after vermillion, read, or.

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THE ART OF JAPANNING, VARNISHING, &c.

EVery Artift, who undertakes to treat of his Profeflion, before he enters on the work, muft describe the Instruments and Materials with which it muft be performed: and by obferving this method, thofe perfons who either for diverfion or advantage defign to be Mafters of this Art, furnifh themfelves with all things neceffary after the beft manner, fhall lay a good foundation, and may proceed to praftife with chearfulnefs and fuccefs. And that no one may impofe upon you in the Price or Goodnefs of your Drugs; that your Spirits be very ftrong, your Gums and Metals of the beft; take this following account, as your only fecurity againft all coufenage and impofture. But before I fpeak of thefe things which the Shops fupply us with, I prefume tis convenient to acquaint you with others, that conduce to the compofition, mixture, and prefervation of the Varnifh, Colours, &c.

And 1. two Strainers are required; made of pretty fine Flannel or ordinary courfe Linnen, in fhape like a Tunnel, or Sugar-loaf, or a Jelly-bag that women ftrain Jellies through: one is ufeful for ftraining your white Varnifh, and the other for your Lacc-varnifh, and Lackers, when you make any.

2. You muft have two Tin-tunnels; one to ufe with your Lacc-varnifh, and Lacker, and the other for your white varnifh for the fame ufe.

3. You muft be furnifhed with feveral Glafs bottles, and Vials fmall and great, according to the quantities of varnifh you make or ufe; and alfo with Gally-pots of feveral fizes, to put your varnifh in when you intend to varnifh: and for your Blacks, with which other things muft fometimes be mixed, Gally-pots are better than any other veffels to mix your blacks and hold your varnifh, becaufe they are deeper than Pottingers, and not fo wide, fo that the varnifh doth not fo foon thicken, for the Spirits in a deep Gally-pot do not fo fuddenly evaporate.

4. You fhould provide feveral forts of varnifhing-tools, or Pencils, according to the greatnefs or finalnefs of the thing you defign to work. Your varnifhing Pencils are foft, and made of Camels hair, and are of feveral prices, according to the bignefs of them: the beft that I know are fold in Blackamoor-ftreet by Clare-market, but you may have them alfo at feveral Colour-fellers in and about London, from fix-pence to half a Crown or three fhillings the Pencil.

5. You muft procure Pencils to draw with, fmall and greater, Goofe, little Goofe, Duck, and Swallow-quills, according to your
B work.

work. The longest haired Pencils I esteem the best for this use ; you may have them all at the places afore said.

6. You should get 200 of Musle-shells, that you may have them always in readines to mix your Metals or Colours in, as occasion shall serve: not that you need use the tenth part of them at once, but that you may not be to seek when you want ; and for change, when your metals or colours, by frequent mixture, shall grow dirty, which will be, if you work in Gum-water, as I shall hereafter observe.

7. You should furnish your self with Rushes, which are called Dutch-Rushes, with which you must smooth your work before you varnish it ; and as you lay your ground of Colour or Black, if any knob or roughness appear on your work, you must take a Rush and rush it off ; so must you do as oft as you find any roughness or grittiness upon your work, either in laying your Grounds, or varnishing it up. You may buy them at the Iron-mongers.

8. You must have Tripoly to polish your work after it is varnished, which must be scraped, or finely pounded and sifted. But of this I shall have occasion to speak more largely, when I come to give rules for varnishing : you may have it at the Iron-mongers.

9. You cant be without store of Linnen-rags as well coarse as fine, with which you must polish and clear up your work, as shall be shewed hereafter.

10. You must have Sallet-oyl for clearing up your work, as shall be notified in its proper place. All these things every Practitioner ought to provide, as being necessary to his future performances.

CHAP. I.

A true Character of the best SPIRITS, GUMS, METALS, &c.

To know a Strong Spirit.

TO make Varnish you must have Spirit of Wine, which must be strong, or it will spoyle the Varnish, and not dissolve your Gums, and consequently hinder your design ; for the stronger your Spirits are, the better will the Varnish be ; the Spirits only being to dissolve the Gums, in order to make them spread, or lie even upon the work. After it hath performed that work, the sooner they evaporate the better, and the higher the Spirits are drawn, the less flegm or watery parts are in them ; and the less of watery parts are in the Varnish, the sooner it dries, and is fit for polishing, is more permanent, and will come to the greater and better gloss. But this is of little use now Varnish is so much used ; for the Distillers have learned by practice and custom to make Spirits that just dissolve the gums, only it requires the longer drying : Yet these Spirits that
are

are commonly used will sometimes be too weak, either by neglect or dishonesty of the Distiller, who hath not sufficiently deflegm'd or drawn all the watery from the spirituous parts. Therefore the best way to prove your Spirits, is to take some in a spoon, and put a little Gun-powder in it, and then set the Spirit on fire with a little paper or candle, as you do Brandy, and if it burn so long till it fire the Gunpowder before it go out, it is fit for use, and will dissolve your Gums. All pretenders to this Art know this way of trying Spirits, and the damage weak Spirits do the Varnish: but since my design is to inform the ignorant and learner, it is reasonable and necessary in this place to insert it.

To choose Gum Lac, called Seed-Lac.

The best Seed-Lac is that which is large-grained, bright, and clear, free from dust, sticks, and drops. The Drugsters afford it at several rates, proportionable to its goodness, generally for 14. 16. 18d. the pound.

To choose Gum Sandrick.

The best Gum-Sandrick is the largest and whitest, or that which casts the least yellow. Let it be as free from dust or drops as you can. The value of it is commonly 12 or 14d. the pound.

To choose Gum Animæ.

The whitest, clearest, and most transparent is the best, and the price is sometimes 3, 4, or 5s. the pound, according to the goodness.

Venice-Turpentine.

The only directions that can be given for the choice of it are, that the clearest, finest, and whitest is the best; and is sold at 18 or 20d. the pound.

White Rosine.

The best white Rosine is white and clear, and purchased at 4d. or 6d. the pound.

Shell-Lacc.

The best Shell-Lacc is the most transparent, and thinnest, and that which (if melted with a candle) will draw out in the longest and finest hair (like melted wax) because the toughest. There are counterfeits, which you must endeavour to discover by the aforementioned rule. The true may be procured at 18d. or 2s. the pound.

Bole Armoniak.

The best Bole Armoniak is as fine as red Oker, and of a deep dark, blackish-red colour, free from grittiness or gravel, and is commonly called French-Bole.

Gum Arabick.

The best is clear, transparent, and white: you may pick it yourself from the Drugsters, but then you must pay something more; the common rate is 12d. the pound.

Gum Capall.

The best Capall is the whitest, freeest from drofs, and thick dark stuff that is incorporated with the Gum. It is of it self a thick whitish heavy Gum, and rarely without that dark and droffy mixture; but that which is clearest and freest from the said stuff is the best. The price is 12, 16, or 18d. the pound, according to the goodness.

To choose Gum Elemni.

The best Gum Elemni is the hardest, whitest, and clearest, freeest from drofs or dirt. It is brought over commonly in the bark or husk of a Tree; which you may take off as well as you can before you use it. The Shops can afford it at 4 or 5d. the ounce.

Rosine.

The best is the clear, and transparent, and clarified. It may be had at 3d. the pound.

I singlafs.

The best I singlafs is that which is clearest, and whitest, freeest from yellowness. It is, if good, worth 3 or 4d. the ounce; you may have it cheaper by the pound. The same may be observed by other things; for the greater quantity you buy at a time, the cheaper will your purchase be.

Gambogium.

The best is that of the brightest yellow, and freeest from drofs. Some of it is dirty, thick, and full of drofs: there is difference in the price according to the goodness; the best is worth 6d. the ounce.

To choose Benjamin, or Benzoin.

The best is that of a bright reddish colour, very like to clarified Rosine, but never so fine, freeest from drofs or filth. Tis as in goodness, 4d, 6d, or 8d, the ounce.

Dragons Blood.

The best is the brightest red, and freeest from drofs. You may buy it in drops (as the Drugsters call it) which is the best. They are made up in a kind of leaf or husk: it is commonly 8d. sometimes 12d. the ounce, according to the goodness.

I have here given you an account of those things and Gums you will have occasion for in Japanning and Varnishing, and are all to be bought at the Drugsters at or neer the prizes I have specified; and may serve to inform you in some measure of the Gums, their excellencies and value, but time and practice will make greater discoveries. Indeed grains of Allowance must be made for their different prizes; for their rise and fall depends upon the plenty or scarcity of them, and varies according to the goodness of the commodity. It is not necessary to furnish your self with all, or any part of these, but as you have occasion to make use of them: for of some,

some an ounce will serve you a great while, of others a pound will be used at one time; of which you will know more, as I shall have occasion to treat of them in their order. I shall now proceed to Metals, which I will also give you some account of; and first,

Of Brass-dust, which is commonly amongst the Artists called Gold-dust.

This cannot be made in England fit for use; though it hath often been attempted, but comes from beyond Sea, as the rest of the Metals do that are good. Germany is the place where the best of all sorts is made. The best Brass-dust is that which is finest, and of the brightest and most gold-like colour; which you may best discern, by taking a little on your finger, and squeezing it along your finger with your thumb; and if it be good, it will look with a bright and rich lustre, if bad, it will appear of a dull clayish colour, and will never work lively and bright. Several sorts of this Metal are imported here from foreign parts; which differ vastly as to the coarseness and fineness, and the different ways of working them: As for instance, the coarser sort will work well with Gold-size, which will not with Gum-water; other differences will arise also, which are subject to the discoveries of practice and experience. From this difference of Metals proceeds that of the prizes; for some are worth 12 or 14s. the ounce, whilst that others amount to not above 4 or 5s. for the same quantity. But these are two extremes; the first very good, and the other altogether as vile and bad; for there is a middle sort between both, which is generally afforded, by those that buy of the Merchant, for 8 or 9s. the ounce, which will work well.

To choose Silver-dust.

Some have attempted to make Silver here in England, but none I ever saw comparable to that beyond Sea; for that enjoys a lively bright lustre like polished or new-coined silver, (which you may find by squeezing it between your finger and thumb) whereas that which we make here is dull, dead, and heavy, and indeed is a fitter representation of a Colour than a Metal; and by comparison you may find, how the dimness of the counterfeit is obscured by the dazzling lustre of the true. Its price is answerable to its goodness and excellency, for its lowest rate is no less than 16s. the ounce. But I would not have the price fright any one so far, as to prefer cheaper before it, for tis neither so useful nor pleasant in the work, and the best will go farther than this proportionable to its price. Tis customary in Japan to use several sorts of Metals that are corrupted and adulterate, and they are layed too in garments, flowers, houses, and the like, which makes the work look more beautiful and surprizing: these likewise are vended and sold for the aforesaid use, and are commonly called,

First, Green-gold,

Is a certain corrupted mettle, casting a kind of a dead greenish colour, and is commonly sold at 6s. the ounce.

Dirty-Gold

Is another kind of corrupted metal, which bears some resemblance to drossy dirty Gold : it may be purchased at 6s. the ounce.

Powder-Tinn

Is Tinn grinded to dust, of a dull, dark, though silverish colour ; made use of in Rocks, &c. Its price the same with the former.

Of Coppers

There are three sorts, Natural, Artificial, and Adulterate.

The Natural is ground without mixture, well cleansed, and is of the true genuine colour of Copper, and is sold at 6 or 7s. the ounce.

The Artificial accordingly exceeds the Natural ; it is more deep and red, but very clear, and its bright glittering colour shews how far it is possible for Art to exceed Nature. 'Tis very rarely procured, or sold under 10s. the ounce.

The Adulterate Copper is of a thick, heavy, metallick colour, and is commonly used to work other metals on, as if that be layed for a Ground, you hatch or lighten with bright gold, or other light metal ; and sold at 6s. the ounce.

There is also used in Japan-work metals, commonly called Spec-
kles, of divers sorts, as Gold, Silver, Copper, and many other colours, some finer than other, and worked according to the fancy of the Artift, either on Mouldings, the out or in-side of Boxes, Drawers, &c.

Of these, those that are used in the Indian work, are the Gold, Silver, and Copper, though, as aforesaid, every one may take their own fancy or humor in the use of them. They are made here in England very well, and are sold each of them much at a price, 5 or 6 shillings the ounce, according as they are in fineness. So that what I said concerning the rates of Gums, will hold good here also, That a glut or scarcity of these enhances or abates the price ; but generally these are exposed to sale at the rates I have affixed to each of them. These are sold by great quantities by several Merchants in London ; and in lesser, by as many. I shall only mention two, viz. a Gold-beater, at the hand and hammer in Long-acre ; and another of the same trade, over against Mercers-Chappel in Cheap-side.

Having given you an account of Gums, and Metals, I shall briefly run over the Colours, which formerly our ignorant English and French Practitioners used to mix with their Japan-work, but improperly ; for the true natural Japan-work, so called from the Island of that name, did so far surpass all the painting of Bantam, and the neighbouring places, in goodness of black and stateliness of draught, that no fiddling pretender could match or imitate it ; and the ignorant undertaker not being able to make his work look well and
lively,

lively, inserts several colours as a file to set it off, when (unfortunate man) instead of art, fancy, and skill, he exposes a piece gay, quaint, gawdy, finical, and mean, the genuine product of ignorance and presumption; and an ornament of Bartholmew, or Alehouse, rather than a Palace or Exchange. The mistake of Bantam-work for Japan, arose from hence: all work of this kind was by a general name called Indian; by use they so far confounded all together, that none but the skilful could rightly distinguish. This must be alledged for the Bantam-work, that tis very pretty, and some are more fond of it, and prefer it to the other, nay the work is equally difficult with Japan: But if I must give you my opinion, my skill and fancy induce me to believe, that Japan is more rich, grave, and Majestick, and for that reason ought to be more highly esteem'd. But fancy, like Proteus, putting on a thousand shapes, cannot, ought not, be confined; and those who are inclined to admire colours, may find safe and exact rules set down by way of information.

And first, some colours we call transparent; such as are those we lay upon Silver, Gold, or some light colour, and then they appear in their proper colours very beautiful and lively. Of these for your use is, first, Distilled Verdigreece, for a green; fine Lake for a red; fine Smalt, for a blew. To render these useful, you must observe the following method: having provided a Porphyry, or Marble stone, with a Muller, take what quantity of Verdigreece or Smalt you please, and with Nut-oyl, so much as will just moisten it fit to work, grind it upon your stone till it be as fine or finer than butter; then put them in shells, mixing them with Turpentine-oyl till they be thin enough for your use; lay these upon silver, gold, or any other light colour, and they will be transparent, and alter their lightness or darkness according to the lightness or darkness of the metals or colours you lay under them. The same may you do with Lake for a red, only instead of Nut-oyl, use Drying oyl to grind it in.

Other colours are used which have a body, and are layed on the black of your table or box, where you have designed any thing, as Flowers, Birds, &c. These are Vermilion for a red, White-lead for a white; some use Flake-white for a white, which is a purer white, and much better, but for ordinary work the other will do: if you make a blew to lay upon your work, you must take Smalt, and mixing it with Gum Arabick-water put in what quantity of white-lead you please, to make it deeper or lighter, as your fancy shall direct; but you must put in white-lead, because your blew will not otherwise have a body; so must you do with all colours that have not a body of themselves. Some use Rozett, fine Lake, and Sea-green, for a Purple, and other sorts of Reds and Greens: and indeed ways of working are very numerous, which being now out of fashion, I should to no purpose both trouble you, and tire myself, by increasing the number; those which I have mentioned are

abundantly sufficient, for any that design to have something beside gawdy colours in their work. 'Twill be convenient here to insert a caution concerning these Colours; that they are all to be layed with Gum-water, except the transparent ones above-mentioned: and whosoever hath a mind to work, either in Gum-water, or Gold-fize, shall hereafter receive sufficient Instructions for both.

According to my promise I have in full treated of Gums, Metals, and Colours; I shall now in full proceed to discover the methods that are used to make Varnishes.

CHAP. II.

How to make VARNISHES.

To make Seed-Lacc-Varnish.

TAKE one gallon of good Spirit, and put it in as wide-mouthed a bottle as you can procure; for when you shall afterwards strain your varnish, the Gums in a narrow-mouthed bottle may stick together, and clog the mouth, so that it will be no easie task to separate or get them out. To your spirits add one pound and a half of the best Seed-lacc; let it stand the space of 24 hours, or longer, for the Gum will be the better dissolved: observe to shake it very well, and often, to keep the Gums from clogging or caking together. When it hath stood its time, take another bottle of the same bigness, or as many quart-ones as will contain your varnish; and your strainer of flannel made as aforesaid in this book, fasten it to a tenter-hook against a wall, or some other place convenient for straining it, in such a posture, that the end of your strainer may almost touch the bottom of your Tin-tunnel, which is supposed to be fixed in the mouth of your empty bottle, on purpose to receive your strained varnish. Then shake your varnish well together, and pour or decant into your strainer as much as conveniently it will hold, only be sure to leave room for your hand, with which you must squeeze out the varnish; and when the bag by so doing is almost drawn dry, repeat it, till your strainer being almost full of the dregs of the Gums, shall (the moisture being all pressed out) require to be discharged of them: which faeces or dregs are of no use, unless it be to burn, or fire your chimney. This operation must be continued, till all your varnish is after this manner strained; which done, commit it to your bottles close stoppt, and let it remain undisturbed for two or three days: then into another clean empty bottle pour off very gently the top of your varnish, so long as you perceive it to run very clear, and no longer; for as soon as you observe it to come thick, and muddy, you must by all means desist: and again, give it time to rest and settle, which 'twill do in a day or two; after which time you may attempt to draw off more of your fine varnish, and having so done you may
lay

lay it up, till your art and work shall call for its assistance. 'Tis certain, that upon any emergency or urgent occasion you may make varnish in less time than 24 hours, and use it immediately, but the other I recommend as the best and more commendable way: besides, the varnish which you have from the top of the bottles first pour'd off, is of extraordinary use to adorn your work, and render it glossy and beautiful. Some Artists, through hast or inadvertency, scruple not to strain their varnish by fire or candle-light: but certainly day-light is much more proper, and less dangerous; for should your varnish through negligence or chance take fire, value not that loss, but rather thank your stars that your self and work-house have escaped. Should I affirm, that the boiling the Lacker and Varnish by the fire, were prejudicial to the things themselves, I could easily make good the assertion; for they are as well and better made without that dangerous element, which if any after this caution will undertake, they may feelingly assure themselves that 'tis able to spoil both the Experiment and Operator. On the other hand, no advantage or excellence can accrue either to Lacker or Varnish; especially when, as some of them do, 'tis boiled to so great a height, that this *Ætna* is forc'd to throw out its fiery eruptions, which for certain consume the admiring *Empedocles*, who expires a foolish and a negligent Martyr; and it would almost excite ones pitty, to see a forward ingenious undertaker, perish thus in the beginning of his Enterprize; who might have justly promised to erect a noble and unimitable piece of Art. as a lasting monument of his fame and memory: but (unhappy man) his beginning and his end are of the same date: his hopes vanish, and his mischance shall be registred in doggrel Ballad, or be frightfully represented in a Puppet-show, or on a Sign-post.

To make Shell-Lacc-varnish.

Whosoever designs a neat, glossy piece of work, must banish this as unserviceable for, and inconsistent with, the rarities of our Art. But because 'tis commonly used by those that imploy themselves in varnishing ordinary woods, as Olive, Walnut, and the like; 'tis requisite that we give you directions for the composition of it, that if your conveniency or fancy lead that way, you may be supplied with materials for the performance. Having therefore in readiness one gallon of the best Spirit, add to it one pound and a half of the best Shell-Lacc. This mixture being well stirred and shaken together, should stand about twenty four hours before 'tis strained: You might have observed, that the former varnish had much sediment and dregs; this on the contrary has none, for it wholly dissolves, and is by consequence free from all dross or fæces; 'tis requisite however to strain it, that the sticks and straws, which often are in the Gum, may by this percolation be separated from the varnish. But although this admits of no sediment, and in this case differs from the aforementioned varnish, yet 'tis much inferior also to it in an-

other respect; That this will never be fine, clear, and transparent, and therefore 'twill be lost labour to endeavour, either by art or industry, to make it so. This small advantage however doth arise, that you need not expect or tarry for the time of its perfection, for the same minute that made it, made it fit for use. This, as I hinted before, is a fit varnish for ordinary work that requires not a polish; for though it may be polished, and look well for the present, yet like a handsome Ladies beautiful face, it hath no security against the injuries of time; for but a few days will reduce it to its native mist and dulness. Your common Varnish-dawbers frequently use it, for tis doubly advantageous to them: having a greater body than the Seed-Lacc, less labour and varnish goes to the perfecting their work; which they carelessly flubber over, and if it looks tolerably bright till tis sold, they matter not how dull it looks afterward; and lucre only being designed, if they can compass that, farewell credit and admiration. Poor insufficient Pretenders, not able to make their work more apparent, or more lasting than their knavery! And tis pretty to think, that the same misty cloak will not cover the fraud and the impostor! that the first should be a foil to the second, and the dull foggy work serve only to set off the knavish Artist in his most lively colours! But to conclude, if with a pint of this varnish you mix two ounces or more of Venice-turpentine, it will harden well, and be a varnish good enough for the inside of Drawers, frames of Tables, Stan-pilars, frames of Chairs, Stools, or the like. Painters Lacker made also with this Varnish, and something a larger quantity of Turpentine put to it; serves *very well* for lackering of Coaches, Houses, Signs, or the like, and will gloss with very little heat, and, if occasion be, without.

To make the best White-varnish.

I would desire the Reader to observe, that when any Drugs, Gums, or Spirits, are set down for the use and making of Varnish, Lacker, or the like, though we do not to every particular write the best of such a sort, yet that you should understand our meaning to be such, when we do not particularly forbid the getting or buying of the best; for tis irksome and tedious to every single drug to affix the word Best: wherefore to avoid so needless a repetition, I shall forbear mentioning it above once, either at the beginning or end, as it shall seem most necessary. Besides, tis a very reasonable supposition; for you must not expect to raise a Noble piece from dross or rubbish; to erect a Louvre or Escorial with dirt or clay, nor from a common Log to frame a Mercury. But to return to our design of White-varnish: Being furnished with one pound of the whitest Gum Sandrick, one ounce of the whitest Gum Mastick, of the clearest Venice-Turpentine three ounces, one ounce and a half of Gum-Capal, of Gum-Elemni half an ounce, of Gum-Benzoin or Benjamin the clearest half an ounce, one ounce and half of the clearest Gum Animæ, and of white Rosine half an ounce. The

Gums

Gums thus separately and in their due quantities provided, each being the best and most excellent in its kind; I must desire you to observe carefully the following order in their mixture and dissolution. Put the Capal and Rosine in a glass-vial, with half a pint of Spirits to dissolve them: for the same end to another glass, containing three quarters of a pint of Spirits, confine the Gum Animæ, Benjamin, and Venice-Turpentine. The Gum Sandrick and Mastick should likewise enjoy the privilege of a distinct bottle, and in it a pint and half of Spirits, for their more effectual dissolution; and lastly, the Gum Elemni by it self, content with one quarter of a pint of Spirits to dissolve it. 'Tis not highly necessary to observe the quantities of Spirits so exactly: but this in general I advise, that all your Spirits exceed not three quarts. They must in this distinct manner be dissolved, the better to extract the whole virtue of each Gum, and prevent their clogging and caking together, which would much hinder their being quickly or thoroughly dissolved. I must not forget further to acquaint you, that the Gum Animæ and Benjamin be very finely pounded and reduced to powder, before they are mixed with the Spirits; you may also bruise the Capal and Rosine, as for the rest, they may be used or put into the Spirit as you buy them, without any alteration. Having thus carefully mixt 'em, let them carels one another for two or three days, and make them dance or change places, by shaking very briskly each bottle or vial once in two hours for the first day; the remaining time shake them at your own conveniency. Then take a bottle large and capacious enough to hold all the varnish you have made, and through the fine linnen Strainer (of which in the beginning) strain all your gums, mixt as aforesaid; but squeeze gently, and not with so close an hand as was required for your Seed-Lacc: for by this easie percolation you prevent the sandy, hard, gritty stuff passing through into your varnish. Some never strain it, but with great diligence pour it off as long as twill run clear from each bottle. But if I may be a competent Judg, this is not so good a way or so convenient, for these reasons: You have not, first, so much varnish, neither can you pour it off so clear and fine as you may by straining. Again, your dregs being left in, by frequent use will fill up your vessel, and the fresh Gums will mix with the old, and slacken the melting of them, all which our method disallows of, and keeps the bottles empty, and fit for the same repeated use, without these inconveniences. The varnish thus strained having stood three or four days, (the longer the better,) pour off gently as much as will come very clear, reserving the thick and muddy part at the bottom for ordinary uses; as mixing with other varnish for black work, or to gloss the in-side of boxes, as we shall hereafter more fully discover.

To make a White-varnish much inferior to the former.

This is made out of two distinct Varnishes, the one Sandrick, the other of Mastick; of both which take the following account.

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Having

Having provided three quarters of a pound of gum Sandrick, mix it with two quarts of Spirits, and having been well shaken, and stood for about two days, decant or strain it into another bottle, and reserve it for use. Take also of clean pickt Mastick the same proportion, to an equal quantity of Spirit with the former, and in every particular observe the rules for making the Sandrick, as to settling, shaking, decanting, and straining it.

Now when you design to varnish a print or any thing else with this varnish, your usual proportion for mixing them, is to add a double part of gum Mastick to a single part of gum Sandrick. As for instance: suppose the work would take up or consume three quarters of a pint of varnish; then by the foregoing rule you must put half a pint of Mastick to a quarter of a pint of Sandrick-varnish, and so accordingly in a lesser or greater quantity. And we think fit to make these varnishes severally, and so mix them, that we may have our varnish answer to our desires in softness or hardness. Now when you have set by your work for two days, you may try its qualities, if, by pressing your warm finger on it, you leave your print behind you, tis a sign that it is too soft, and a wash or two of the Sandrick will harden it: if it not only resist your touch, but hath some streaks, flaws, or cracks, like scratches, sometimes more or less, you may be sure tis too hard, and it must be remedied by a wash or two of your Mastick-varnish. Some usually dissolve these gums together, and others mix them before hand, and by so doing are not certain how their varnish will succeed; for it often happens, that some parts of each gum are softer than others, and so the contrary. Should therefore a varnished piece prove too soft, or hard, this way cannot remedy it; for to wash it again with the same, is only a repetition of the former miscarriage. These things being premised, I need not infer which way will prove the most rational, certain, and satisfactory.

To make Varnish, that shall secure your Draught, whether Gold-work, or Colour, from the injuries of Tarnishing, and will give it a gloss.

Before we come to the Varnish, tis requisite to acquaint you with the manner of preparing Turpentine, which is the chiefest ingredient. Take then of good Venice-turpentine as much as you please, inclose it in a Pipkin that will hold double the quantity that you put in. Having prepared a fire that will never flame out, but burn gently and clearly, set your pot over it, but be cautious that it boil not over, thereby to prevent the firing your Turpentine and your Chimny. To this gentle boiling motion caused by the fire you must join another, and with a stick very often stir it, until you find tis rendred fit for use; which you may discover, by dropping a little of it on the ground; for when tis cold, it will crumble to powder between your fingers, if it be sufficiently boiled; and when tis brought to this pass, nothing remains but that you let it cool, and preserve it for the following composition.

Your

Your Securing-varnish requires a quarter of a pint of the finest Seed-Lacc-varnish, (which is always the top of it,) and one ounce of this boiled Turpentine finely powdered; they must be both shut up close prisoners in a double glass-vial or bottle, capacious enough to contain a double quantity; which being stopp'd close, may be plac'd over a very gentle fire, that it may leisurely heat, thereby to forestall the danger of breaking the glass, which it is certainly past when tis exceeding hot; and in this condition keep it for some time, simmering, and smiling: then take it off, and give it vent by unstopping; so done, return the stopple shaking it well, and place it on the fire again, never discontinuing the operation; but repeat the foresaid method, till such time as your Turpentine shall be so far dissolved, that the bigness of a large Pea shall only remain visible; for that being the drops and indissoluble part, will not endure to be incorporated. Being arrived to this degree, remove your Varnish, afford it two days to cool and settle; and vouchsafe the clearer part fresh lodgings in a clean bottle, that may entertain and keep it for your future designs.

Now whatsoever you propose to be by this varnish secured, if convenience will allow, should be destined to a warm place, that it may dry the sooner; if you cannot admit of it, then give it the space of half an hour to dry between every wash; however it will gloss either way. Then take a Pencil, for great work large, and so the contrary, proportionable to your draught: with this Pencil dipt in the varnish, secure it, that is, pass it over, leaf by leaf, and sprig by sprig, not omitting to give your Rocks, Figures, &c, the like entertainment; but be sure above all, that your steady hand never trespass upon the least part of your black or ground-work. Having run over all your draught thus, three or four times, for oftner may spoil the colour of your metal, you may rest satisfied that your undertaking (whether of Gum-water, or Gold-size) is armed against all injuries and Tarnish; and, if performed Artist-like, adds to the native lustre of the metals, with an artificial gloss more bright, durable, and surprizing.

To secure your whole piece, both Draught and Ground-work, whereby it may endure polishing, and obtain a Gloss all over, like some of the Indian performances.

Here also, as in the last, your patience must be desir'd, and before we open our Scenes, think it reasonable to give you a survey of those passages which must be transacted in the Tiring-room or Shop, before the Actors and Operators appear on the Stage. That necessary and serviceable friend, Venice-Turpentine, here also gives his attendance: who in the quantity of one pound, to three pints of water, takes up his lodging in a clean, earthen, Pipkin, almost as large again as the Inhabitants. These Guests so disposed of, with their house of clay the Pipkin, place over a gentle fire, and by degrees warm them, till they being pleased with their habitation begin to simmer, and dance a little; then do you promote their pa-

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sttime

stime by stirring with a stick, (as in the last Chapter you were directed.) But if they finding the place too hot for them, should endeavour to escape by boiling over, which you'll soon discover by the rout and bustle, and rising of the water; release them, not from the Vessels but fix the Pipkin in a cooler place; yet so, that they may always dance, and boil leisurely. If you find that a little of this Liquor being pour'd on the ground, if cold, is willing by your fingers to be reduced to powder, you may conclude that the operation has succeeded well, and ought now to be concluded. Having stood long enough to loose its acquired heat, and will suffer you to handle it; part these fellow-sufferers, by taking the Venice-Turpentine into your wet hands, and therewith squeeze from it its friend the water, as clean as possibly; roll it into the figure of a ball, and after a day or two pound and beat it into fine powder, and in a fit place set it to dry, but not too near the fire, which will melt it; and lastly, imprison it in a Gallipot.

This Operation is just like the former; but the two Turpentine are at variance, and differ in their colours; for this is as white as Paper, the other, in the last Chapter, as yellow as Amber: You must therefore of necessity judge this most excellent for the present use; although tis more often to be wash't with it, before it will endure and acquire a glittering Polish.

Having advanced thus far, let us now proceed to compose the Varnish, by joining one ounce of this powder'd Turpentine to half a pint of Seed-Lacc-varnish, in a bottle twice as large as the things you put in, close stop't. When it has stood some small time on an easie fire, take it off, unstop, and shake it: be sure to do so, until the Turpentine be dissolved to the bigness of a large Pea; and after two days have both cool'd and settled it, decant and separate the clearest, which is now in readiness for your work. Your piece therefore lying before you drawn and finished, waiting for security against all damages, fortifie after this manner. Take a neat, clean, varnish-Pencil, large or small, as your work is in its Area, surface and breadth; for a large Table or Box requires a great Pencil, and so the contrary. This Pencil being dipt into a Gallipot, wherein you have poured some of the said varnish; when you take it out, always stroke it against the sides of the pot, for fear it should be too full and overburthened with varnish, which will incur this inconvenience, That 'twill lie thick and rough in some places, whereas a smooth and even superficies is its greatest beauty. This, without any distinction, must wash over your whole work, both draught and ground: And you must do it five or six times, as you see the gold and metals keep their colour, gently warming and thoroughly drying it between every wash; and indeed it must be but just warm, for if more, 'twill ruine all your labour. Having observed these rules, as also that it must by all means be evenly and smoothly done; let it have rest for three or four days before you attempt
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any thing further upon it. After this time is past, provide some Tripole, scraped with a piece of glass, and a fine rag, which dipt in a basin of water, and some powder of the same Tripole being lick't up by the said cloth, therewith in a moderate way, neither too hard or too soft, rub and stroke, until it becomes smooth and glossy; but if it should come so near your gold or draught as to molest and displace it, utterly desist, and rub no more there, but let your chief aim be to render your ground or black, bright and smooth, for there your wavings and unevenness will be most discernable. Now to fetch of the Tripolee, take the softest Sponge soak'd in water, and with it wash it off, and a clean cloth or rag to dry and free it from all the Tripolee that remains. But because this will not free the crevices and fine lines from it, mingle a little oyl with a like quantity of Lamblack, and grease your Table all over with the same: now to fetch off this too, labour and rub with a fine cloath, until your Lamblack and Oyl vanish and disappear. To conclude this tedious business; Take one fine clean rag more, and therewith rub and stroke until a gloss is acquired, and that it glissens and reflect your face like a Mirror or Looking-glass.

I suppose by this time it is apparent, what trouble, pains, care, and accuracy, accompany our Undertakings; and if to these you prefix the Skill, Fancy, and fine Hand of the Artift; I say all these must enhance, and set an high price upon good Japan-work.

These instructions for composing Varnishes, the most needful and best for all works of this kind, being thus fully laid down; it will be no ways prejudicial to give some Rules, which must be most strictly observed in all sorts of Varnishing, and to inform you how you may employ these Varnishes about other Woods; or to lay Blacks, and other colours, which are much in vogue with us and the Indians. We grant, it is not a part of Japan-work properly, but rather foreign to that design, but its universal benefit will abundantly compensate for that pretence, and the knowledge of it cannot certainly prove burthenfome to any: But to those especially it is advantageous, who living in the Country remote from Artifts, cannot without great trouble move or alter any thing they have by them, unless assisted by this our information.

CHAP. III.

General Rules to be diligently observed in all manner of Varnishing.

I Am very solicitous that your Work should succeed, and therefore take all imaginable care to guide you, so that you cannot possibly miscarry; and in order thereunto shall propose Rules and

general Cautions,, which I desire you would have always in mind, and call them to your assistance in all your undertakings.

1. Therefore let your wood which you intend to varnish be close-grained, exempt and free from all knots and greasiness, very smooth, clean, and well rush't.

2. Lay all your Colours and Blacks exquisitely even and smooth; and where ever mole-hills and knobs, asperities and roughness in colours or varnish offer to appear, with your Rush sweep them off, and tell them their room is more acceptable to you than their company. If this ill usage will not terrifie them, or make them avoid your work, give them no better entertainment than you did before, but maintain your former severity, and with your Rush whip them off, as often as they molest you.

3. Keep your work always warm, by no means hot, which will certainly blister or crack it; and if that mischance through inadvertency should happen, tis next to irreparable, and nothing less than scraping off all the varnish can rectifie the miscarriage.

4. Let your work be thoroughly dry, after every distinct wash; for neglect in this point introduces the fault again, of which we warned you in the second rule, That your varnish should not be rough and knobby.

5. Let your work lie by and rest, as long as your convenience will admit, after tis varnished; for the better will your endeavours prove, the longer it stands after this operation.

6. Be mindful to begin your varnishing stroak in the middle of the table or box that you have provided for that work, and not in full length from one end to the other; so that your brush being planted in the middle of your board, strike it to one end; then taking it off, fix it to the place you began at, and draw or extend it to the other end; so must you do till the whole plane or content be varnished over. We have reasons too for this caution, which if neglected, has several faults and prejudices attending it; for if you should undertake at one stroak to move your Pencil from end to end, it would so happen that you would overlap the edges and mouldings of your box; this overlapping is, when you see the varnish lie in drops and splashes, not laid by your brush, but caused by your brushes being at the beginning of the stroak overcharg'd and too full of varnish, and therefore we advise you to stroke your pencil once or twice against the sides of the Gallipot, to obstruct and hinder this superfluity; small experience will discover these mistakes.

7. When you come to polish, let your Tripolee be scraped with glass or a knife: for fine work your rags must be fine, and your Tripolee too delicately small, and powder-like; and so for common work, coarse linnen, and coarser Tripolee will be very servicable: let your hand be moderately hard, but very even, in all your polishing-stroaks; and remember to polish and brighten one place, as much as for that time you intend to do, before you forsake it, and pass over to another. For

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8. Remember, never to polish your work as smooth as you intend at one time, but let it rest two or three days if you can after the first polishing, and then give it the finishing and concluding stroak. Be circumspect likewise that you come not near the wood, to make your piece look thin, hungry, and threadbare: should you therefore injure your workmanship after this manner, it will demand another varnishing for satisfaction and reparation.

9. Take a large quantity of Tripolee at the first polishing, till it begins to become smooth; afterwards, a very small parcel will suffice. Circumspectly examin your Tripolee and clout, lest some mischievous, unwelcome gravel, grittiness, or grating part, unawares steal in, and rase or scratch your work; it will prove no easie matter to hide the flaw and damage: and if ever it should so happen, you must retrieve your negligence by your labour, and with your cloath wrapt about your forefinger polish the faulty place until you have brought it to a good understanding and evenness with the rest of the piece, and the wounded part to be no more visible.

10. When you resolve to clear up your work, and put it in its best apparel, remove and wash off your Tripolee with a Sponge and water: drink up that water with dry linnen, and with oyl mixt with Lamblack anoint the whole face of your work; let no corner or moulding escape, for this will totally free your piece from the lurking Tripolee. Now tis time that these should withdraw, and as they turned out the Tripolee, so must a clean linnen rag displace them, and put them to shift for new quarters; and then with another clean, very fine, soft, dry cloath, rub it all over; spare no place, or pains, but salute it all with a nimble, quick stroak, and as hard an hand, and the fruits of your industry will be a dazzling lustre, and an incomparable gloss.

Lastly, for white-work, be kind and gentle to it, let your hand be light and even, and your skill in polishing it neat and curious; and observe, that when tis to be cleared up, you must not pollute and dawb it with Lamblack, but oblige it with oyl and fine flower instead thereof.

To conclude, let this Chapter be well studied, and remember, that without it you cannot regularly or safely perform the task: This is the Common-place-book, to which I shall continually refer you; and if you will prove negligent and remiss in this particular, I shall prophesie, that nothing can so infallibly attend you as Error and Disappointment.

CHAP. IV.

*Of varnishing WOODS without Colour.**To varnish Olive-wood.*

VWhat remains then, but that from Precept we proceed to Practice, that from mean and ordinary endeavours we successively rise to the excellence and perfection of this Art. To begin with Olive-wood, which for Tables, Stands, Cabinets, &c, has been highly in request amongst us; that which is cleanly workt off, void of flaws, cracks, and asperities, is a fit subject for our skill to be exercised in. Having rushd it all over diligently, set it by a weak fire, or some place where it may receive heat; and in this warm condition, wash it over ten or twelve times with Seed-Lacc-varnish, that remained after you had poured off the top for a better use, with a pencil proportioned to the bigness of your Table or Stand, or the like; let it thoroughly dry between every wash; and if any roughness come in sight, rush 'em off as fast as you meet with them. After all this, welcom it with your Rush until tis smooth, and when very dry, anoint it six several times with the top or finest part of the aforesaid Seed-Lacc-varnish. After three days standing call for Tripolee scraped with a knife; and with a cloth, dipt first in water, then in powdered Tripolee, polish and rub it till it acquire a smoothness and gloss: but be circumspect and shie of rubbing too much, which will fret and wear off the varnish, that cannot easily be repair'd: If when you have labour'd for some time, you use the rag often wetted, without Tripolee, you will obtain the better gloss. Then wipe of your Tripolee with a sponge full of water, the water with a dry rag; grease it with Lamblack and Oyl all over; wipe off that with a cloth, and clear it up with another, as I have most fully shewed in the last Chapter, to which I refer you. If after all this pains your work look dull, and your varnish misty, which polishing before tis dry, and damp weather will effect; give it a slight polish, clear it up, and that will restore its pristine beauty: If you have been too nigardly of your varnish, and there is not enough to bear and endure a polish, use again your finest Seed-Lacc, and afford it four or five washes more; after two days quietness polish and clear it up. Should any one desire to keep the true natural, and genuine colour of the wood, I council him to employ the white-varnish formerly mentioned, as every where answerable to his purpose; for this being of a reddish tawny colour, and so often washed with it, must necessarily heighten and increase the natural one of the Olive.

To varnish Walnut-wood.

To avoid a tedious and troublesome repetition or tautology, I shall refer you to the last Chapter, and desire you to observe the
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same method exactly for varnishing Walnut, that I gave you for Olive. And farther take notice, that those Rules will hold good also for all sorts of wood, that are of a close, smooth grain, such are Yew, Box, the Lime-tree, and Pear-tree, &c. Thus much may suffice for varnishing woods without colour; we pass over from hence to treat of the adorning woods with colour, and of each in its order.

CHAP. V.

*Of varnishing Woods with Colour.**Of Black Varnishing or Japan.*

BLack varnishing is done in imitation of Japan-work; and because the making this very good is a great ornament to the whole undertaking, I shall give you the best account I can possibly for the making it. Having provided wood, close-grained, and well wrought off, rush it smooth, and keep it warm by a fire, or in some hot place; but be always cautious, that whilst you varnish, you suffer not the piece to take the eye of the fire, that is, come so near it as to burn, scorch, or blister your work, which is an unpardonable fault, and remedied no other way when committed but by scraping off the varnish, as I hinted in the Chapter of Rules and Directions. Those that make it their trade, generally work in a Stove, which is beyond all dispute the best and safest way; and I would advise those, who intend to make it their employment, to use no other; because it gives an even and moderate heat to all parts of the room: but those who for pleasure, fancy, and diversion only, practise; for them I say, a great fire in a close, warm chamber, may perform it as well. In the next place, pour some of the thickest Seed-Lacc-varnish into a Gallipot, adding to it as much Lamblack as will at the first wash blacken and discolour the work; the Colour-shops furnish you with it for 2d, 4d, or 6d the barrel, whose price is equal to its bigness: With this varnish and black mixt together varnish over your thing three times, permitting it to dry thoroughly between every turn. After this, take more of the Lac-varnish, and mix with it Lampblack to the same degree of thickness with the former. This is the only black for this business, I prefer it before Ivory, (tho some differ with me on this point;) this is a fine, soft, and a very deep black, and agrees best with the varnish; how you shall make it, I will in the next Section direct you. With this black composition wash it over three times, between each of them rushing it smooth, and suffering it cleaverly to dry. Then with a quarter of a pint of the thickest Seed-Lacc, mix of Venice Turpentine the bigness of a walnut, and shake them together until it is dissolved, and observe this proportion in less or greater quantities. Now put in Lamp-black enough to colour it,

and no more, and with this wash it six times, letting it stand 12 hours between the three first and the three last washings. Having thus clothed the piece with ordinary varnish as with a common under-garment, we now intend to put on its gayest apparel, and cover it all over with the top and finest of the Seed-Lac-varnish, which must also be just coloured and tinged with the Lamp-black: twelve times must it be varnished with this, standing as many hours between the six first and the six last washings, with this never to be forgotten caution, That they stand till they are dried between every distinct varnishing. After all this give it rest for five or six days before you attempt to polish it; that time being expired, take water and Tripolee, and polish it according to the directions I have assigned and taught you in the Chapter for Olive-wood: but however take along with you this further remark, That you allow three times distinct from each other for polishing; for the first, labour at it till tis almost smooth, and let it stand still two days; the next time, polish till it is very near enough and sufficient: lay it aside then for five or six days; after which, lastly, polish off, and clear it up as you were before instructed. Following this course, I have, I will assure you, made as good, as glossy, and beautiful a Black, as ever was wrought by an English hand, and to all appearance it was no way inferior to the Indian.

I promised to detect and lay open the whole Art, and do resolve by no means to fall short of my engagement. I intend therefore to pleasure you with another way to make good Black, and having variety you may take your choice, and try either, as your fancy or Genius is inclined. I must confess, I have made excellent good black this way too, and such as in all respects would match and parallel the foregoing. Lay your blacks as before, and take of the best Seed-Lac-varnish, and the White-varnish, (I mean the first White that I taught you to make in this Book) an equal quantity, and vouchsafe to give it a tincture only of your Lamp or Ivory-black; wash your work with it six or eight times, let it stand the space of a day or two, and dry between every turn; then repeat it four or five times more, keeping it but just warm, and having rested a day or so, anoint it as often with the fine Seed-Lac-varnish only. To conclude, in a weeks time, after all this has been done, it will be dry enough to polish, and not before, which you may then do, and clear it up. You will observe, that your glossy performances after some little time may happen to wax dull, misty, and heavy; which a slight polish will remedy, with clearing it up afterward. Now the causes of this disappointment are two; either first, your varnish is not reasonably well dried, or it has not a sufficient body of varnish; both these occasion it to mist, and, as it were, to purl. Tis no hard task to distinguish them: if the former is in fault, it will appear dull, but of a full body, and smooth; if the latter, the work will look hungry, and so bare, that you may almost, if not quite, see the very grain of the wood through your varnish.

varnish. This last fault is mended by five or six washes more of your fine Seed-Lacc; the other is assisted by frequent polishings, with discretion. One Memorandum I had almost passed over in silence, which I presume I have not any where mentioned; You must look upon it as a necessary remark, and by no means to be omitted, and this it is; To be industriously careful, in laying on your colours and varnish, never to strike your pencil twice over the same place, for it will make your varnish or colours lie rough and ugly: but let every stroke anoint a place not washed before, carrying a steady, quick, and even hand; beginning at the middle of the table, and so conveying your brush to either end, until the whole surface has been passed over. Perhaps I have here spoken the same thing over and over again; in justification whereof, I alledge what Seneca did to those, who objected that he was guilty of tautologie, and repetition; "I only (says he) inculcate often the same precepts to those who commit and react the same vices: This is my case; if you charge me with that fault, my plea is his; I often admonish you, and insert many cautions which refer to the same error, and apply 'em to those who are subject to frequent miscarriages.

To make Lamp-black.

Being furnished with a Lamp that has three or four Spouts, for as many lights and cotton-week, which you may have at the Tallow-chandlers, twisted up so big that it will but just go into the nose of your Spouts; for the greater light they make, the larger quantity of black is afforded. Procure a quart of oyl, by the Oyl-shops rated at 6d. and so much will make black enough to use about a large Cabinet. Get a thing to receive your black in, such in shape and substance as you may often see is planted over a candle to keep the flame and smoak from the roof or ceiling of a room. Having placed your weeks in their proper apartment, and put in the oyl, fire or light 'em, and fix your receiver over them so close, that the flame may almost touch them. After it has continued so the space of half an hour, take off your receiver, and with a feather strike and sweep off all the black on it. Snuff your weeks, and put it on again, but forget not to supply your Lamp with oyl, as often as occasion shall require; and when you imagine more black is stuck to the receiver, do as before directed: and thus continue and persevere, until you have obtained black enough, or that all your oyl is burnt up and exhausted. This is that which is properly called Lamp-black, and is of excellent use for black varnish.

White Varnishing or Japan.

You cannot be over-nice and curious in making white Japan; nothing must be used that will either soil or pollute it, in laying on the colour, or in varnishing. Your first necessary therefore is Isinglass-size, (to make which the next Section shall instruct you;)

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scrape

scrape into it as much whiting, as will make it of a reasonable thickness and consistence; or so long, till by a stroak with your pencil dipt into it, it will whiten the body which your brush has passed over; your own discretion is the best guide. Suffer it not to be in extreams, either too thick or too thin; but with your brush, made of the softest Hogs-hair, mix and incorporate very well the whiting with your size. This being prepared, whiten your work once over with it, and having stood till tis thoroughly dry, do it all over again; and when dry, repeat it a third time: after which let it stand twelve hours, but be sure to cover and defend it from dust before tis varnish'd. Take then some rushes; rush it as smooth and as close to the wood as you can conveniently. This done, procure some white flake, with which the Colour-shops can furnish you; mix it too with your size only, that it may lie with a full, fair body on your piece: With this, three several times whiten your work, giving it sufficient time to dry between each of them; then rush it extraordinarily smooth, but be not now so bold as you were before; adventure not to come near the wood, but by all means keep your distance. These two sorts of white being used, we charge you with a third, and that is, white Starch, boiled in fair water, until it come to be somewhat thick, and with it almost blood-warm wash over the whole, twice; never forgetting that it should dry between every turn. After 24 hours rest, take the finest of your white-varnish, and with a pencil (first washed in spirit to clean it from dust) anoint or varnish your work six or seven times, and after a day or two do the like again. These two fits of varnishing, if done with a fine careful hand, will give it a better gloss than if it were polish'd; if not so accurately performed, tis requisite to polish it; and in order thereunto, you must bestow five or six washes of varnishing more than to the former: so that if tis done so well, that it stands not in need of a polish, two turns of varnishing will suffice; but if it must be polish'd, three are absolutely required, besides a weeks rest before you begin polishing. Care and neatness should attend this operation from one end to the other; for in polishing, your Linnen and Tripolce must be both of the finest; your hand light and gentle, your cloth neither too wet, or too dry; and when you clear it up, and give it the finishing, concluding stroak, fine flower and oyl must be admitted to the performance, but Lamp-black utterly laid aside and excluded.

To make Isinglass-Size.

Take an ounce of Isinglass, divided or broke into small pieces; let it stand in a clean Pipkin, accompanied with a pint and a half of fair water, for twelve hours together. Place the vessel in a gentle fire, suffer it to boil mighty leisurely, and continue siniling and simmering, till it is wholly consumed and dissolved in the water. After the water it self is wasted and boiled away to a pint or less, remove it, and let it stand in a convenient place to cool. This when cold,

cold will turn to a Jelly, which we call Isinglass-size. You are advised to make no more than what will serve your present occasions, for two or three days will totally deprive it of its strength and virtue. 'Tis of great use, not only in the foregoing white-varnish, but several other things, hereafter to be mentioned.

To make Blew-Japan.

This task calls for several ingredients, and those too diversly prepared, before they can be admitted to the composition. In the front white-lead appears, which must be ground with Gum-water very finely on a Marble-stone. The next in rank is some of the best and finest Smalt, (to be met with in the Colour-shops,) which you must mix with Isinglass-size; adding, of your white-lead so grinded, a quantity proportionable to the Blew you intermix with 'em, or as you would have it be in strength of body. All these well stirred and temper'd together, being arrived to the consistence and thickness of common Paint, wash over your work with it, and, when perfectly dry, do the like three or four times, until you observe your Blew lies with a good fair body; if it should so fall out, that the Blew should be too pale and weak, put more Smalt, and no white-lead into your size. Having rush't it very smooth, strike it over again with this stronger Blew: soon after, yet not till it is very dry, with a clean pencil give it, at two several times, as many washings with the clearest Isinglass-size alone; and lay it aside for two days carefully covered, to preserve it from dust: The same diligence forget not in making White-Japan, which does as absolutely require a covering, until either of them is secured by a proper mantle of their own, varnish, which is sufficient to guard 'em against all injuries of dust or dirt. But to proceed: When you have warmed it by the fire, imploy again your cleanest pencil, dipt in a small portion of white-varnish, anointing your work seven or eight times; desist then for one day or two, after which wash it again as often as before. Lay it aside for the same space of time, which being expired, repeat your washes the third and last time, as often as formerly. So many operations certainly deserve some leisure minuts, and a week at least must be pass'd over, before you dare presume to polish it. When that is done, with Lamblack and oyl clear it up, and lend it a glissening, smooth, and pleasant countenance. Observe, that your Blews being more deep and dark, thin or pale, depends wholly upon the different quantities of white-lead, that are mixt with the Smalt after the first washes: for as a small proportion of Lead introduces the first, so a greater plenty occasions the latter.

Let this serve for a general caution in laying either Blews, White, or any other colours with Isinglass-size; Let it not be too strong, but rather on the contrary very weak, but just sufficient to bind your colours, or make them stick on your work: for if it be otherwise, it will be apt to crack and flie off. But last of all,

when you lay or wash with clear Ilinglafs, to keep you varnish from soaking into, or tarnishing your colours, then let it be of a strong and full body.

To make Gum-water

Hardly any can be ignorant of the making of this; tis very common, and easie, and the composition consists of two bodies only. In three quarters of a pint of fair water dissolve one ounce of the whitest Gum-Arabick, carefully and cleanly picked: If you keep stirring and shaking it, the sooner 'twill be dissolved; which done, strain it through a fine Holland-rag into a bottle, and if you want it, use it.

To make Red-Japan.

This beautiful colour is made several ways, and we want not drugs and mixtures to vary the different Reds, and humour all fancies whatsoever. I shall confine their variety to three heads: 1. The common usual Red; 2. the deep, dark; and lastly, the light, pale Red. Of these in their order.

In contriving the first, Vermilion deservedly claims the chief place: Tis mixt with common size by some, by others with the thickest of Seed-Lacc. The last I judge most fit and useful, for this reason; because it will not then break off in polishing, as that mixt with size frequently does: neither is it more chargeable, seeing it helps better to bear the body of varnish that shall be spread over it; Your mixture should keep a medium between thick and thin; tis difficult, and almost impossible to assign exact Rules for mingling your Colours, in general we tell you between both extremes; small practice and experience will master this seeming difficulty. Your work being ready and warm, produce your Vermilion well mixt with the varnish, and salute it four times with it; then allow it time to dry, and if your Reds be full, and in a good body to your liking, rush it very smooth: so done, wash it eight times with the ordinary Seed-Lac-varnish, and grant it a repose for twelve hours; then rush it again, though slightly, to make it look smooth. And lastly, for a fine outward covering bestow eight or ten washes of your best Seed-Lacc-varnish upon it: and having laid it by for five or six days bring it forth to polish, and clear it up with Oyl and Lamblack.

The next in succession to be discours'd on is the dark, deep Red. When you have laid on your common Red as before directed, take Dragons-blood, reduce it to a very small dust or powder, and as your judgment and fancy are inclined, mix it, a little at a time, with your varnish; and indeed you will find, that a very small portion will extreemly heighten your colour, as also that every wash will render it deeper; but when you find it has acquired a colour almost as deep as you design, forbear, for you must remember you have more varnish of Seed-Lacc to lay on, which will add and supply what is wanting. Consider therefore how many washes
are

are still to be laid, and according to that use your Sanguis Draconis, or Dragons-blood. This performance differs no way from the former, but must be managed by those rules given for polishing and clearing the other Red, the Sanguis only excepted.

But in the third place, to oblige any person that is an admirer of a pale Red, we assign these instructions. Take white-lead finely ground with your Muller on the Marble-stone, you must grind it dry; mix it with your vermilion till it becomes paler than you would have it, for the varnish will heighten it: stir therefore vermilion, white-lead, and varnish together very briskly; which done, give your work four washes, and then follow closely the prescriptions laid down for the first Red varnish. You must in the foregoing mixture consult with your self, how many times you are to varnish after the Red is laid; for if many, consider how they will increase and heighten the colour, which for that reason must be paler, and have a more large portion of white-lead allotted it. By these means we have opened a spacious field, we have discovered the very nature of the thing; our Art has been freely displayed, and we have been neither penurious or niggardly in our communications: What admirable Products may we expect, when a lively and unlimited fancy is exercised in an Art that is equally boundless and unconfined.

To lay or make Chestnut-colour-Japan.

This colour is now very much used, and of great esteem, especially for Coaches; I have also made other things, as Tables, Stands, and Looking-glass-frames. I must of necessity declare, that it sets off Gold and Metals well: and because variety in every thing that is new is acceptable, but chiefly to the ingenious Gentry, for whom these pages are intended, I could not in silence pass this colour over.

The things that make up this colour are Indian Red, or else Brown red Oaker, which will serve as well: of either, what quantity you imagin will serve your turn, and with a Muller or Marble-stone grind it, mixed with ordinary size, as fine as butter. From thence translate it to a pottinger; then take a little white-lead, and laboriously grind it after the former manner, and with the same size: In the third place, have Lamblack ready by you; mix this and the white-lead with the Indian Red or Oaker in the pottinger, stirring and incorporating them together. If the colour produced by these three be too bright, darken it with Lamblack; if too dark and sad, assist it with white-lead; this do, until you have mastered the colour you wish for. One thing here commands your memory and observation; The same colour exactly which you make when tis thus mixt and wet, will also arise when tis varnished, although when tis laid and dry, twill look otherwise. Now when the colours are thus managed in the pottinger, set it over a gentle fire, put to it so much common size as will give it a fit temper to work, (neither too thick, or too thin.) Being thus qualified for

business, call for a fine proportionable Hogs-hair brush, with it wash over smoothly your piece; let it dry, and repeat until your colour lie full and fair. Again, give it a drying time, and rush it smooth, but by no means close to the wood, unless you intend to begin your work anew, and varnish it a second time. After a days rest, adorn it with three or four washes of the fine Seed-Lacc-varnish; when that is also dried on, varnish it up to a body, fit to receive a polish, with your white varnish. To conclude, its due and necessary time being spent, polish and clear it up with Lamblack and Oyl.

To make an Olive-colour.

This performance is every way answerable to the former; only instead of those put English Pinck: grind it with common size, and when it has attained the consistence of butter, convey it to a pottinger, and there Lamblack and White-lead mixt with it produce the Olive-colour; if too light, Lamblack will prevent it, if too dark the other. But farther, if you think it looks too green, take raw Umber, grinded very fine with size; add of that enough to take away that greeness: And nothing then remains but a due heed and observance of the foregoing rules for Chestnut. But before we leave this Section, remember, That all colours laid in size will not endure so violent a polish as those in varnish, but are more subject to be rubb'd off.

By these methods you may make any colour you can fancie; with this admonition, That all colours, which are light and apt to tarnish, and loose their glossy beauty with Seed-Lacc, must be humour'd and varnished with White-varnish, the Seed-Lacc being prejudicial.

CHAP. VI.

To work Metals or Colours with Gum-water.

VHensoever you design to work Japan in Gum-water, you are advis'd to mix all your Metals and Colours, and every thing you make use of, with this Gum-water. But because there is no general Rule without exception; therefore we understand all colours, except those which before we call'd Transparent ones, for they require a different and distinct way of operation, as the beginning of this Treatise has directed.

When you design a mixture, forget not to stir the ingredients very well, together with the water, in a Muscle-shell, which I conceive is more proper for this undertaking, and for that reason desired you to furnish your self with a great number of them. Be cautious, I beseech you, that you make not the mixture of your metals or colours with the gum-water either too thick or thin, but endeavour to keep the golden mean between both, that it may run
fine

fine and smoothly from your pencil. Beside, be not prodigal, lavish, and profuse of your metals, but make a quantity requisite for your present business only, and provide not for time to come; for from a mixture of this nature, made in too large a proportion, several inconveniences arise. As first, in some short time, the metals standing useless, wax dry, so that they must be wetted for a second employment with the said gum-water, which by repetition corrupts both the metal and the colour, by receiving too much of gum in them: and although this might be likewise prevented, by adding fair water instead of that mixt with gum; yet in spite of all care and diligence, and beyond expectation too, another trouble and fault accompanies it, and that is, the dust will gather to them and render 'em unfit and unserviceable. Again, for your colours especially, your Shells must be often shifted and changed, otherwise the gum and colours will be both knobby and drie, in that unseemly posture sticking to your shells. I believe it will be your own negligence, and the fault will lie at your door, if after every minute caution and remark, whereby you may not fail of success if they are observed, you should through inadvertency miscarry. But to proceed: Your metals or colours thus prepared, well mixed, and ready for the business, stir them with the pencil about the shell, and draw it often on the side of the shell, that it may not be overloaded with the metal, when you design to draw small strokes; on the other side, not too drie, because you must be careful in making all your strokes full and fair, by no means thin and craggy; carry your hand even and steady, and finish your line before you draw off your hand, otherwise you may incur making the stroke uneven, and bigger in one place than another. But when you attempt great broad things, as Leaves, or large work, then charge your pencil very full, with this proviso only that it does not drop. Here is one observation to be made for Gum-water, which in Gold-size is useless and unnecessary, and indeed very advantageous for learners, and the unskilful especially, and by them in a particular manner to be remarkt and observed. But first, tis useful for all; for that place you intend to make your draught in must be rubbed with a Tripolee-cloth: the reason is this; your black, when cleared up, will be so glossy, and as it were greasie, that your metal or colour will not lie on it, unless it be primed with the Tripolee in that manner. So when you find any such greasiness on your work, rub it with your Tripolee-cloth, and permit it to dry; after which you will perceive the draught of your pencil to be smooth and neat, and to your liking and satisfaction.

Now that which I before spake of in behalf of beginners is this; It may very reasonably be supposed, that a practitioner in his first attempts may not frame his piece even and regular, or his lines at a due distance: now upon these or any other accounts, if he is displeased at his own handy-work, he may with this useful Tripolee-cloth wipe out all, or any part which he thinks unworthy to stand,

and on the same spot erect a new draught; by these means he may mend, add, blot out, and alter, until the whole fabrick be of one entire make, good and answerable to each part of the undertaking. I cannot better in words express my self, or with my Pen deliver more full or plain rules for mixing your colours and metals; neither can I with my tongue more steadily guide your hand and pencil. I am apt to flatter my self so far, as to believe what I have communicated may abundantly suffice, and shall therefore add nothing more with relation to laying metals or colours, and the manner or method of working them in Gum-water. That part of our Profession which we call Setting off, or, which is the same thing in other words, Seeding of Flowers, Veining of Leaves, Drawing of Faces, and making Garments, desires not our present consideration, but shall be handled in the following pages.

CHAP. VII.

To make Gold-size.

THis is the other famous composition, which is in great esteem and use for laying metals and colours, and ought in due manner to be made known; but we shall first give you the method of mixing those things which are concerned in its production. Their names and quantities are, of Gum animæ one ounce, Gum Espaltum one ounce, Lethergi of Gold half an ounce; Red-lead, brown Umber, of each the like portion. To these, shut altogether in a new earthen pipkin, large enough to hold one third more than you put in, pour of Linseed oyl a quarter of a pint, of drying oyl half a pint, with which you may be furnished at the colour-shops. Place this earthen vessel thus loaded over a gentle fire, that does not flame in the least, keeping it continually so warm, that it may but just bubble up, or almost boil; should it rise over, your chimney and materials would be in danger: if you perceive it swelling, and endeavouring to pass its bounds, remove it from that hot place to a more cool and gentle. When first it begins to simmer and boil a little, with a stick keep moving and stirring it, until the whole mass of Gums be incorporated and melted; not that you must desert or forbear stirring until it become as thick and ropy as Treacle, for then it is sufficiently boiled. This done, convey the pipkin to a cool place, and there let it rest, till the extremity of heat is over. After which time, strain it through a coarse linnen cloth into another earthen pot, there to cool, and lie ready for use.

This is the manner of its composition. I shall now insert the ways of working it. When your business shall call for this Size, bring forth what quantity you require for the present, and put it into a muscle-shell with as much oyl of Turpentine as will dissolve the size, and make it as thin as the bottom of your Seed-Lacc.

Hold

Hold it over a candle, and, when melted, strain it through a Linen rag into another shell. To both these add vermilion enough to make it of a darkish red; but if this make it too thick for drawing, afford it as much oyl of Turpentine as will make it thin enough for that purpose. The main, and indeed only design of this Size, is for laying on of Metals, which after this manner must be performed.

When you have wrought your work, and that which you intend to decipher on it; draw this Size all over that part, and that part only, which you resolve shall be gilded or adorned with gold, passing over those places where you think to lay your other metal or colours, as Copper, Silver, or the like. Your Size being thus wrought for the Gold, let it stand till tis so dry, that when you put your finger upon any of it, it may be glutinous and clammy, and stick a little, but not so moist that the least spot or speck should come off with your fingers, not unlike to thick glue when tis half dry. When you find it agrees with the characters we have given you, conclude that to be the critical minute, the very nick of time, wherein you must apply your Gold; then take a piece of soft, washt leather, or the like: this being wrapt about your forefinger, dip it into your gold-dust, and rub where the gold-size is laid, for it will stick on the size, and no where else. If any dust of Gold lies scattered about your work, with a fine varnishing-brush, that hath not been used, brush or wipe it all into your gold-paper. Thus being thus finished, take your pencil in hand again; draw that part which you design for Copper with Gold-size also; and when dry, cover it with Copper after the same method that you received for Gold. A third time wield your instrument, the pencil, and lay Size for Silver, and operate as afore said; so likewise for all dead metals, wheresoever you design them: Only take this remark along with you, That you lay your metals successively one after another, suffering each to dry and be covered, before you begin a distinct one; as for instance, Your Gold-size must be dry, and gilded before you proceed farther, and so of the rest. After all these, lay your colours with gum-water if you are pleased to insert any, reserving the Rocks for the last labour; which how to perform, in the succeeding discourse shall be demonstrated.

It may often so fall out, that you'll mix more Gold-size than at one time may be consumed, or you may be called off from your business for a day or more. Now to preserve it entire and moist enough, and in condition fit to work against next time, observe that after it has stood five or six hours, a film or skin will arise and overspread the surface of it: then put it in water, and let it remain there with the pencils covered too, until your next operation shall desire their assistance; before which, you must stir it well together, and employ it as you think fit. If it should chance to grow thick, the old remedy, Venice Turpentine, will relieve it. But farther, if by frequent mixture with Turpentine, often putting into water, or

long standing, it becomes skinny, thick, and knobby, and by consequence unserviceable; the best use you can possibly put it to, is to cast it away.

I shall conclude this Chapter with my requests to you, so to order and compose your Size, that, being of a good mediocrity, neither too thick or thin, it may run smooth and clear, and your strokes be fine and even; in some time you will be so skilful, and so delighted with your draught, that the most subtle, neat, and hairy lines will adorn your piece, and your work in all good qualities may, though not exceed, yet vie with, and parallel the Indian.

CHAP. VIII.

To varnish Prints with White Varnish.

Procure a Board very fit and exact to the Print you resolve to varnish, and thus manage it. Get common Size, which you may have at the Colour-grocers; warming it by the fire, scraping whiting into it; make it of an indifferent thickness, and with the softest hogs-hair-brush, proportionable to your board, wash it once over, permitting it to dry: then white it again, and so repeat, till it lies with a fair body, and quite covers the grain of the wood, which may be of Deal, Oak, or any other. This done, take off your whiting with rushes very close, and smooth, but not so far as to discover the grain: then with flower and water make a paste thick as starch, and with your hand or brush work or dawb over the backside of your Print, with an even steady hand lay your Print on the board, and stick it on as close as you can with all imaginable diligence. Suffer it not to cockle, wrinkle, or rise up in little bladders; if it should, press it down with your hand, but be sure your hands be extraordinarily clean and free from all dust, filth, and pollution when you come to paste on the Print, that it may not in the least be soiled, before tis varnished. Smooth down the whole paper with your hand, pass it over and over, that every part thereof may stick close and adhere to the whiting. I cannot here burden you with too many cautions and caveats; for if any the least part of your Print rise or bubble, the whole beauty and pride of the Picture is destroyed when you come to varnish. Being thus closely and carefully fixt to the board, set it by for 24 hours, or longer; then take the clearest of your Isinglass-size, and with a soft pencil wash over your Print; but be certain it be dry before you pass it over again, which you must do with a quick hand, and not twice in a place; give it leisure to dry, and afford it one wash more, with two days rest: Afterwards with the finest and clearest of your white-varnish grant it six washes by a gentle heat, not too nigh the fire, to avoid blistering. When 24 hours
are

are past, give it eight washes with the said clear varnish: lay it aside for two days, and then vouchsafe to anoint it six or seven times more, giving it leave to rest two or three days. Having advanced thus far, with linnen and Tripolee, both very fine, polish it, but with gentle and easie stroaks. Lastly, clear it up with oyl and flower.

This I must needs commend for a pleasing and ingenuous contrivance; a new sort of Speculum or Lookingglass, which without deceit gives a double representation. Here the Prince and Subject may (and not irreverently) meet face to face; here I may approach my King without the introduction of a Courtier: nay, tis so surprizing, that though I expect no shadow but that of my friend graven on the paper, it will in spite of me, in an instant too, draw my own Picture, so to the life, that you might without perjury swear tis the Original. Amorous piece! That (without the assistance of a Cunning man) obliges me with a survey of my Self and Mistress together; and by this close conjunction, by these seeming caresses of her in Effigie, I counterfeit, nay almost antedate our more substantial enjoyments! Kind Picture too! which will permit me to gaze and admire without intermission, and can survey me as I do her, without anger or a blush! I know very well no Apelles dare pretend to delineate or make an artificial beauty, that shall equal her natural: Know, that the perfections of her Body as far surpass the skill of the Pencil, as those of her Mind transcend the expressions and abilities of the Pen. But yet, in one circumstance, and one only, the Picture does excel my Mistress; the shadow is more lasting than the substance; She will frown, wrinkles and old Age must overtake her; but here she lives always Young, for ever blooming; Clouds and Tempests are banish'd from this Hemisphere, and she blesses me with a gracious and perpetual Smile.

CHAP. IX.

How to lay Speckles or Strewings on the out, or inside of Boxes, Drawers, Mouldings, &c.

HAVING in readiness a quantity of Speckles, which you think may answer your present occasion, mix them with so much of your ordinary Lac-varnish, as will, being put both into a Gallipot, render them fit to work with a suitable Pencil, but by no means so thick as you would Colours. For this use only you must reserve a Brush, with which you must stir 'em very well, and your work being gently warmed by the fire, wash it over with it, and when dry, again. This repeat, until your Speckles lie as thick and even, as you could wish or desire them; afterwards beautifie them

with three or four washes of your Varnish mixt with Turpentine, and you have concluded all, unless you intend to polish; for then, having done every thing as above directed, tis required that you give it eight or ten washings of your best Lac-varnish, which being all successively dried on, you are at liberty to polish it. All sorts and variety of coloured Speckles may be thus ordered, except Silver, the laying on of which choice metal deserves the best and finest of your Seed-Lacc; instead of the ordinary; and the best white-varnish too, must be employed to bring it to a polish; but if you conclude upon not polishing it, be more sparing of your varnish, for fewer washes will suffice.

CHAP. X.

To lay Speckles on the drawing part of Japan-work, as Rocks, Garments, Flowers, &c.

BEfore you can proceed to try this experiment, a little Sieve must be framed after this manner. Take a small box, such as Apothecaries employ for Pills, something larger in compass than a Crown-piece, about half an inch deep: strike out the bottom, and in its place bind very strait about it fine Tiffanie, and to prevent coming off fasten it on the outside of your box with thread, and reserve it for your necessities.

Now when your work expects to be adorned with Rocks, Flowers, or the like, use first your Pencil to varnish those places with, and whilst it is wet put some of your strewings into the Sieve, and gently shake it over the place designed for your Rock, until it appears answerable in Speckles to what you intended; but especially when for Rocks, call for a pencil about the bigness of your finger, one that is drie and new, and with it sweep all those stragling Speckles, that lie beyond the wet or varnished part, into the sides and top of the Rock that is thus moistned; for there it will not only stick, but render your work, thicker of Speckles in those places, more beautiful, and oblige it with a kind of shadow and reflection.

This work admits of no idle hours, no interludes and vacations, for as soon as one part is compleated, the other desires to undergo the skill and contrivance of the Artist. When this Rock is drie, the next must succeed in operation; and by this way of working the one, when, and not before, the other is perfectly drie, you may, like the Giants of old fighting against Jupiter, cast mountain upon mountain, lay one rock upon or beside another, of different colours, and as many shapes, until the whole enterprize of Rock-work is completed. But observe, that in sweeping your Speckles into the edges of each Rock, you intermix not one portion of scattered parts

parts into a Rock of a different colour; let them therefore enjoy their proper strewings. When you thus lay your Rocks on your work being cold, it will certainly for the present look dull and heavy, nay to that degree, that you might very well suggest to your self nothing less than the damage and ruine of the whole undertaking. But though no signs of life, beauty, or shadow do appear, let not this startle or discourage you; for when you have secured it, as we directed before, this fright vanishes, the dangerous Mormo or Bugbear disappears, its expected qualities suddenly arise, and by the assistance of your Securing-varnish, it is decked with gay and beautiful apparel.

CHAP. XI.

*To make raised work in imitation of Japan, and of the
Passe.*

TO attempt the composition of this Paste, you must provide a strong Gum-Arabick-water, charged with a double quantity of Gum to that we before taught you. Have in readiness an ounce of Whiting, and a quarter of an ounce of the finest and best Bole-Armoniack; break them on your Grinding-stone with the Gum-water, until they are made as fine as butter, but so thin, that when moved into a Gallipot, it may but just drop from the stick with which you work and stir it. If its condition be too thick, gum-water will relieve it; if too thin, you must give it an addition of Whiting and Bole-Armoniack, as much as will make it capable of working well, and regularly. The stick that I spake of before should resemble that of a Pencil-stick, but it must have a more sharp and taper end. This dipt into your paste, drop on the Rock, Tree, Flower, or House which you purpose to raise, and by repetition proceeding until tis raised as high and even as you think convenient. Prevent all bladdering in the paste, which scurvie fault proceeds from a careless and insufficient grinding and stirring of the Whiting and Bole: should you with these blemishes endeavour to raise, your work when dried will be full of holes, and thereby destroy the beautie of it. The only way to prevent it in some measure, when so dried, is, with a wet fine cloth wrapt about the finger, to rub it over again and again, until the holes and cracks are quite choak't and stop't up, and after its time of drying is expired, with a rush and all imaginable industry and care smooth it.

These assistances I have laid down only in case of necessity, by way of corrections for accidental miscarriages; for your work will look abundantly neater, if these Errata are prevented by a Paste in the beginning, well grinded and tempered before tis dropped on your work. You are desired farther to observe, that in the Japan

raised-work for Garments, Rocks, &c. one part is elevated and higher than the other; as in flowers, those that are first and nearest to the eye are highest, some leaves too that lie first are higher than those that lie behind them: So in the pleats and foldings of garments, those which seem to lie underneath, are always at the greater distance. I will instance in but one more, and that is of Rocks, where in position the first must always surmount and swell beyond that which skulks behind, and is more remote: The rule holds good in all things of a like nature, and if you endeavour to counterfeit the Indians who take these measures, 'tis reasonable and necessary to follow their prescriptions. I shall assign two ways for its accomplishment, which, if truly and carefully copied out, will come very near the Japan original.

First, after your design is rais'd to a due height, whether Figure or Flower, and well dried, with a little Gum-water, Vermilion, and a Pencil, trace out the lines for the face, hands, or foldage of the garments, for the leaves of your plants and seeds of flowers, or any thing intended, in its proper shape made at first before the raised work was laid, and according to which your Paste was in such manner directed, and confined by those lines that were drawn as its boundaries; for unless such strokes were made, 'tis impossible to laye the paste in its proper figure. This done, three or four small instruments must be procured; one of them a bended Graver, which the Engravers make use of; the rest, small pieces of Steel, in shape like a Chissel of the Carpenters, fastened in a wooden handle, the breadth of the largest, not exceeding a quarter of an inch, of the others sizeably less: With these your raised work must be cut, scraped, and carved, leaving one part higher than the other, keeping due regard to the proportion of the thing you design. But here I must forewarn you of the difficulty of the enterprize; no heavy, rustick hand must be employed in this tender, diligent work; for if in haste or unadvisedly you attempt it, believe me your raised work will break off in several places, to the disgrace of the Artist, and deformity of the piece. Let therefore your tools have an exquisitely sharp and smooth edge, whereby they may cut clean and fine without roughness: And now 'tis time to smooth and sleek it with a brush that has been often used before, in order, in the last place, to cloath it with any metal you shall judge most proper, as shall hereafter be shewed at large.

The other way which we promised for raised work, is this: Strike or trace out your design, as well the inside as the outward; that is, the shape of your face, neck, hands, legs, the chief strokes of the foldings of the under and upper garments, so of flowers, or the like: Then take your Paste, somewhat thinner than you commonly use it, and with it raise the lower garments or parts, which require the least raising. Grant it time to drie thoroughly, and then with a very small pencil dipt into the thickest of your Seed-Lace, varnish just the edges of your raised work; for this intent, that when you
advance

advance the higher part, it may hinder the wet incorporating with the drie, which must be avoided; for should it do so, the work will never shew well. This must be performed as often as you elevate one part above another; and still as your work is exalted, your paste must be thicken'd; and raising each part successively, beginning with the lowest, you are to conclude with the uppermost; and when all is drie, if need require, smooth it with a rush, and then it is in a condition fit to receive your metal. Make ready then what sort of metal you please to cover it with, mixed in gum-water, and with a pencil destined for the use lay it on the raised work full and fair: give it leave to drie, and with a dogs-tooth, which you may have at the Guilders, or a Stone or Agat, by them employ'd in their Frames and Guiding, burnish your work until it is bright, and shines as much as you desire it should. And farther, dip the pencil into your finest Lacc-varnish, and laie it over twice; then set it off, or shadow it with what your fancie directs, but of this I shall discourse hereafter. Take notice, that if you grind more paste than you can consume at once, and it be drie before you shall have occasion for it the second time, grind it again, and tis fit for your business. You may judge of the strength of your paste, by the easie admittance of your nail press'd hard upon it, for then tis too weak, and must be hardened and strengthened by a more strong gum-water: Trials and Experience will give you more accurate, more satisfactorie directions. With these ingredients, joined to Art and Skill, it is possible to make a paste so hard, so stubborn, that a violent stroak with an hammer can neither break or discompose it.

CHAP. XII.

*To prepare ordinary, rough-grain'd woods, as Deal, Oak, &c.
whereby they may be Japanned, and look well.*

Provide ordinary Size, used by the Plaisterers, and vended by Colour-shops, dissolve it over the fire, making it pretty warm; mix Whiting with it until tis of a reasonable body and consistence, yet not too thick; then take a Brush fit for the purpose, made of hogs-hair. Lay your work once over with this mixture of Whiting and Size, and so often repeat it, until you have hid all the pores, crevices, and grain of your wood, suffering it to drie thoroughly between every turn. You may afterwards take a fine wet rag, and rub over your work, making it as smooth as your industry is able; this furbishing it with a cloath dipt in water, we call Water-plaining; when drie, rush it even and smooth, and as close to the grain as possibly you can. This done, wash over your work twice with the thickest of your Seed-Lacc-varnish; after

which, if it be not smooth, again rush it, and in a day or so varnish it over with black, or any other colour, as you have been directed in those places where we have treated of it; when it has stood sufficiently, you may apply your self to finish it by polishing.

According to these methods you are to prime carved Frames for Cabinets or Chairs, when you desire they should look well; with this difference, that these must not be polished, and by consequence require not so great a body of varnish, no more than will contribute to a rich and splendid gloss. There is also another way, which I recommend for the most valuable, because the most durable and lasting, but not indeed of so large an extent as the former, being proper only for the tops of Tables, Boxes, or the like; and thus you must proceed. Boil common Grew in water, let it be fine and thin; into which cast the finest Saw-dust, until tis indifferently thick, and fit to lay with a brush, which you must provide for that purpose. Run it over once with the grew so mixt; if the grain of the wood be not effectually obscured, wash it again, and two days being given to harden, send it to a good workman or Cabinet-maker, who must scrape it with his Scraper, as Pear-tree or Olive-wood are served, and make it as fine and even as possibly he can; then varnish it as you have been learn't to do by Pear-tree, or any other smooth wood. This, if well done, will not come behind any for beauty or durability. Tis confess'd, these labours are to be performed only upon cases of necessity, for they are very troublesome; and if every circumstance were truly weighed, not so cheap or valuable as your smooth, close-grained woods, of all which Pear-tree is in the first place to be esteemed.

Of BANTAM-work.

I Think it most proper in this place to speak of the manner of working at Bantam, because the way of preparing the wood is much the same with that of priming with Whiting. There are two sorts of Bantam, as well as Japan-work: for as the Japan hath flat lying even with the black, and other lying high, like embossed work; so the Bantam hath flat also, and incut or carved into the wood, as a survey of some large Screens, and other things that come from those parts, will beyond all scruple convince and satisfy you: with this difference however, that the Japan-Artist works most of all in Gold, and other metals, the Bantam for the generality in Colours, with a very small sprinkling of Gold here and there, like the patches in a Ladies countenance. As for the flat work, it is done in colours mixt with gum-water, appropriated to the nature of the thing designed for imitation: for the ordering these colours with gum-water, you have already received instructions. The carved or incut work, is done after this manner: Your Cabinet or Table,
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be it whatsoever you please to work on, should be made of Deal, or some other coarse wood; then take Whiting and Size, as before taught, lay it over your work, permitting it to drie between every wash; this must be so often done, till your primer or whiting lie almost a quarter of an inch thick; but always remember to mix your whiting and size thinner than formerly, and lay it therefore over the oftner; for if tis too thick, it will not only lie rough and unseemly, but twill be apt to flie off and crackle. Having primed it to its due thickness, being drie, water-plain it, that is, as we hinted before, rub it with a fine, wet cloth; in some time after rush it very smooth; lay on your blacks, and varnish it up with a good body, and next of all in some space polish it sufficiently, though with a gentle and easie hand. Being thus far advanced, trace and strike out your design with vermilion and gum-water, in that very manner which you intend to cut and carve it, and very exactly; your figures, Trees, Houses, and Rocks, in their due proportions, with foldage of Garments, leafing of Trees, and in a word, draw it as if it were to stand so without any alteration. This finished, exercise your Graver, and other instruments, which are made of shapes, differing according to each workman's fancie: with these cut your work deep or shallow, as you think best, but never carving deeper than the whiting lies, for tis a great error to pass through that and carve your wood, which by no means ought to feel the edge of your instrument. Be mindful likewise to leave black stroaks for the draperie of garments, and the distinction of one thing from another: as for example, if you were to work in this manner the great Bird, which is in the 11th Print at the end of this Book; You ought, I say, to carve where the white is; and leave the black untouch't, which shews not only the feathering of the wings, but the form and fashion of the Bird it self; the same means are to be used in all other things which you undertake. But I should counsel that person, who designs to imitate Bantam work, to endeavour to procure a sight of some Skreen, or other piece; for one single survey of that will better inform him, than ten pages can instruct or demonstrate. Had it been a thing of little trouble, or which might have been useful to the young and willing practitioner, we had inserted a Plate or two of it, for it differs vastly from the Japan in manner of draught; but since tis now almost obsolete, and out of fashion, out of use and neglected, we thought it a thankless trouble and charge to affix a Pattern, which could neither advantage Us, or oblige You: I think no person is fond of it, or gives it house-room, except some who have made new Cabinets out of old Skreens. And from that large old piece, by the help of a Joyner, make little ones, such as Stands or Tables, but never consider the situation of their figures; so that in these things so torn and hacked to joint a new fancie, you may observe the finest hodgpodg and medly of Men and Trees turned topsie turvie, and instead of marching by Land you shall see them taking

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journeys through the Air, as if they had found out Doctor Wilkinſon's way of travelling to the Moon; others they have placed in ſuch order by their ignorance, as if they were angling for Dolphins in a Wood, or purſuing the Stag, and chaſing the Boar in the middle of the Ocean: in a word, they have ſo mixed and blended the Elements together, have made a league between fire and water, and have forc't the clouds and mountains to ſhake hands, nay deprived every thing of its due ſite and poſition, that if it were like any thing, beſide ruin and deformity, it muſt repreſent to you the Earth, when Noah's Flood was overwhelming it. Such irregular pieces as theſe can never certainly be acceptable, unleſs perſons have an equal eſteem for ugly, ill-contrived works, becauſe rarities in their kind, as for the greateſt performances of beautie and proportion.

But to return to our buſineſs. When you have finiſhed your carved work, and cut it out clean and ſmooth, with your pencils lay the colours, well and purely mixt, into your carved work, in the manner which your ingenuity ſhall ſuggeſt, or the nature of it abſolutely require. When the colours are finiſhed, the gold may be laid in thoſe places where you have deſigned it, with powder-gold, or braſs-duſt mixt with gum-water, but that looks not ſo bright and rich as Leaf-gold, which the Bantam Artiſts always employ; and ſo may you alſo, if you make a very ſtrong and thick Gum-Arabick water, which you muſt laie with a pencil on your work, and whilſt it is wet take leaf-gold, cut it with a very ſharp ſmooth-edged knife (on a piece of leather ſtraitly nail'd to a board) in little pieces, ſhaped to the bigneſs and figure of the place where you diſpoſe of it. Take it up with a little Cotton, and with the ſame dab it cloſe to the gum-water, and it will afford a rich luſtre, if your water be very ſtrong; otherwiſe 'twill look ſtarv'd and hungry, when tis drie. Having thus finiſhed your work, you muſt very carefully clear up your black with oyl, but touch not your colours, leſt you ſhould quite rub them off, or ſoil them; for this is not ſecured, as the other Bantam flat-work is; if wet come at this, the colours will be ruined, and peel off. I confeſs I have ſeen ſome even of the raiſed-work, whoſe colours would not ſtir, but none ſo ſecured and firm as flat, in which you'll ſeldom or never find ſome Colours that will not endure a ſecurity with varniſh, but with the loſs of their native ſplendor: but thoſe who pleaſe may leave out the Tarniſhing colours, and ſecure their carved work with a pencil, as formerly directed.

CHAP. XIV.

To take off any Japan-patterns in this Book, upon any piece of work whatsoever.

VWhen your Black, or any other colour is varnished and polish't fit for draught, take a particular design out of this Book, or any thing else that is drawn upon paper, with whiting rub all over the back-side of your Print or Draught, and use a linnen cloth to wipe off all the whiting that lies rough and dusty on the back-side of your paper so whited. Then lay the Print on the Table or Box, with the whited side next to it, in the very place where you design the Draught should be made, and with a needle or piece of iron-wyer round and smooth at the point, fixed in a wooden handle for the purpose, not sharp to cut or scratch your Paper and Print, which we call a Tracing-pencil; with this, I say, draw over and trace the Print as much as you think necessary, taking the most material and outward strokes, or all others which you imagin are hard and difficult to draw without a pattern. This, by the assistance of the whiting with which your paper was rubb'd, will give the fashion and lines of what you have done, upon the Box or Table. After this, if you draw in Gold-size, use Vermilion mixt with Gum-water, and with a small pencil dipt in it, go over those lines made by the whiting; for by this operation it will not easily come off, so that you may work at leisure with the Gold-size. But if you will work your metals or colours in gum-water, then trace or draw over your Design with Gum-water mixed with Brass or Gold-duft. Now either of these ways here mentioned, when drie and finished, will work either in Gum-water or Gold-size, as I have formerly discovered.

CHAP. XV.

The manner of working and setting off some Draughts in this Book.

I Think by this time I may truly say, That I have in a familiar and easie method propos'd Rules for purchasing materials of all sorts, the manner of their composition, with the way of using Varnishes, laying of Metals, Colours, and whatsoever else is necessary, or may claim affinity and relation to the Varnishing and Japanning Art. But because these lines have a double design, to instruct and inform the ignorant, as well as assist those that have a

finall knowledge and finattering in this Science: though I am perswaded I have sufficiently obliged the latter, yet because I may not be so clear and satisfactory in my Rules to those who before never attempted any thing of this nature, to whom tis a perfect Terra incognita, an undiscover'd Province; for their sakes I shall willingly make an addition of a few pages, to shew in a plain and more particular manner the way of working some Patterns in this Book either in Metals or Colours, by the knowledge whereof they may be enabled with ease and inclination to perform any enterprize that shall oppose them. To these I shall affix the different ways of setting off and adorning your work, which I have before rather mentioned and touch't upon, than treated of.

The first eight Copper-prints, at the end of this Book, are several designs for small work, of whose differences their Titles will inform you: Two others for Drawers of Cabinets; one, of all sorts of Birds flying in Antick figures; two, of Birds great and less, standing in various postures; another of Beasts, &c. Two figures of Chinese men and women, in untoward gestures, and habits: Others, of Flower-pots, Sprigs, Trees, and the like: Lastly, their Temples, Structures, and Palaces; their manner of worship, and reception of foreign Ministers and Embassadors; with as much pleasing variety as can reasonably be expected. Any part of these may be placed on the work, as the fancy and ingenuity of the undertaker shall direct: yet I shall give a little light after what manner they may be transposed.

Suppose then you have a large piece of work, as a Table, or Cabinet; take one of the Prints which chiefly complies with your humour, insert others also which may be most agreeable, yet give variety too: borrow a part from one, a figure from another, birds flying or standing from a third; this you may practise until your Cabinet be sufficiently charged: if after all this any thing be wanting, your judgment must order, beautifie, and correct. But observe this always, that if you would exactly imitate and copie out the Japan, avoid filling and thronging your black with draught and figure, for they, as you may remark, if ever you happen to view any of the true Indian work, never croud up their ground with many Figures, Houses, or Trees, but allow a great space to little work: And indeed tis much better, and more delightful; for then the Black adds lustre to the Gold, and That by way of recompence gives beautie to the Black.

But here an Objection may be started; That if a little work is most natural, and according to the Pattern which the Indians have set us, why have not I followed that Rule in my Draughts annexed to this Book? To this I answer; That if I had so done, I must have provided thrice the number of Plates, to shew the variety that these have sufficiently done; not to mention a triple charge that would have attended. Again, should these have been
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beautified with little work, I had then been liable to censure for being niggardly of my Patterns, and depriving the practitioner of choice and variety: But by what I have presented, I have securely failed between this Scylla and Charybdis; have passed the Rock on one hand, and the Gulph on the other; and, if I am not flattered, have not only obtained the good liking of the Curious; but sufficiently supplied the wants of those who are great undertakers. Here you may alter and correct, take out a piece from one, add a fragment to the next, and make an entire garment compleat in all its parts, though tis wrought out of never so many disagreeing Patterns. Besides, I have not by this variety fixt a *Ne plus ultra* to your fancie, but have left it free, and unconfin'd: I do advise, that no one would oblige himself to keep close to the Copy, for even the small Cutts will supply the place of a much larger Box than is there express'd, and not injure or disgrace it. I do with modesty and submission pretend not to confine, but lead and assist your fancie. Thus much in general terms; I'll detain you no longer on this large and pregnant Topick, but regularly now descend to particulars, and instruct you how to work off some of the fore-mentioned Draughts.

To work the First Draught.

This affords you ornaments for the tops and sides of little Boxes; which, when traced out according to the directions already given, must be done with gold, if you work in gum-water: Take your gold-shell, and with your pencil fill some of the tops of your houses; and those parts which you observe in your Print to be mark't with black lines, as the Doors, Windows, &c, afterwards the Sprigs, Flowers, and Birds, all of them in a fair, small, but full stroak: now if you paint these latter things with colours, they may be variously managed, with red, some others with blew, a third with silver, until the whole be entirely compleated. If you think to raise any of these, be sure to practise on those that lie first and foremost, for which I do refer you to the Chapter of Raised work.

When you have thus far advanced, tis required that you should proceed to Setting off, which I desire now to make my business to inform you, as having never yet mentioned it; yet I shall at present confine it only to that of Gum-water, for this is not the way with Gold-size, of which more properly hereafter. When the leaves and tops of your Houses are fairly laid in Flat-work; to make the black and shining veins of your leaves, the tiling of your buildings, and foldage of garments, appear through your gold and metals, as some of the Indian work does, exercise your Tracing-pencil, breathing on your work with your mouth close to it; and when moistened with your breath, streak or draw out the veins and foldage of the figures, their hands, face, and parts so made in their proper order. When your metal begins to drie, and will not separate, force it to part again by breathing on it, for that moist-

nefs will reduce it to obedience, which must be observed too in a moderate degree; for if you make it over-wet and damp, the tracing-iron tis true will disjoin it, yet no sooner can it pass the place but it closes up, and reduces it self to its former amicable conjunction; as a Ship that ploughs and divides the Sea, makes a channel in an instant, but as that fails off the waters return, the breach is healed, and the place of its passage is no more to be found. Too much moisture is therefore as great an inconvenience as none at all. Perhaps your work may be rough and unhandfom before tis thoroughly drie, yet after that, a soft, new pencil by brushing will cast off that disguise, will command the loose rough particles to withdraw, and represent the Veinings and Hatchments in a smooth and pleasant drefs.

To set off Raised work with Black.

When your Raised work has been varnished and burnished, put Lamp-black into a Muscle-shell, and with gum-water hardly wet it, for if you allow it too large a portion, you'll find it a difficult task to make it comply and incorporate: but when it is mixt, which you must perform with your brush, then add as much water as will prepare and enable it, by the assistance of a small well-pointed pencil, to draw fine black stroaks. These must frame the lineaments and features of the Faces, the foldage of your raised Figures, the veins of Leaves, Seeds, the bodies of Trees, together with the black hatchments of your Flowers. If you would have any Rocks speckled, first pass them over with the said black, and when dry, grant them two washes with the Securing-varnish; lastly, lay on the Speckles. One thing here deserves your observation; If your good will and labour cannot be accepted, and your black, or whatsoever you Set off with, will not be received; pass over the Raised work with a Tripolee-cloth in a soft and gentle manner, lest the Metals should be seduced, and forsake their apartment.

This manner of Setting off is more practised than that with a Tracing-pencil, or breathing on it, not only for Raised but Flat-work too; for when your piece is drie, salute it once with the Securing-varnish, after which take your black pencil, and employ it in hatching and veining at your own pleasure; other metals and colours desire the same management: I will give you an instance; if a red flower were to be Set off with Silver, then must your Red be secured with varnish: and being first supposed to drie, hatch and vein it with your Silver. These directions must be of force and consequence in all cases where you design to work one thing on another, whether colour upon metal, metal upon colour, or metal upon metal, without being guilty of false Heraldrie. Having adorned and Set off your piece, if it be Flat-work, you may make use of the varnish spoken of in the 13th page of this Book, to secure your whole piece both draught and ground-work, which will endure polishing: but if for Raised-work, you must make use of the

the other Securing-varnish, which is set down in the 12th page, and the reason is, because your Rais'd-work will not bear a polish as the other, but must only be secured, and cleared up. But here is to be noted, that this last varnish may be used either for Flat, or Rais'd-work, but the former is only proper for Flat. In working with Gum-water be ever vigilant and careful that your metals or colours be not too strong of gum, for it will utterly spoil their beautie and complexion; but when you have sufficiently mixed them in the beginning, fair water afterward may quench their drought. Look upon this as a general, unerring guide; let them be just so far encouraged with gum, as may oblige them to stick close to your work, and enable them to endure varnishing without coming off: If this should at last prove a repetition, you must pardon me; tis a business that I am very zealous for, and should be highly concerned to think of a miscarriage, in the last, ornamental part of the undertaking; and if you strictly examin it, you'll find, if this is not new altogether, yet it may bear a second reading, as being a paraphrase and explanation of the former.

I intimated before, that the Rocks should be last of all treated of, because not to be finished till the rest were compleated; only those few scattered sprigs, supposed to grow out of them, that they may not appear bald and naked, nor too full of 'em, lest they might confound the eye, and interrupt the shadow. Now if these Rocks are to be covered with metals, with your pencil lay Gold, Silver, or Copper, in a full body round the outward stroaks, which were traced with your pencil, in breadth a quarter of an inch; prevent its being too wet; call for a large Goose-quill-pencil, cut off the point, making it flat and blunt at the end: With this touch or dab your Metal, then do the like to the black part of the Rock, whereby that may be sprinkled with some of the metal too, by little and little continue it until the whole be scattered over; yet these Specks should be thicker towards the sides and top, than in the middle. Other metals, artificial and adulterate, may be laid according to these directions, and may be dabb'd or workt with your middle finger as well as the Goose-pencil. Thus much may suffice for the first Print, workt in Gum-water: I shall give some brief directions how to proceed in some few more; for by understanding those, you may safely adventure on any that remain,

The Second Pattern.

This is a representation of Birds, which if you work with gold and colours, I advise that the body of the first Bird, that stands before the other, be done in gold, the wings with bright copper, and, when secured, let its breast be redded a little with vermilion, in that part of it which in the Print is darker than the rest. Then take your black shell, and beautifie the eye; and the touches about it with black; as also the feathering of the body and the back. Let

the wing be set off or feathered with silver, the long black strokes in the feathers of it with black; the tail, legs, and bill with gold, but change the white lines in the tail for black. The bodies of the other Birds may be laid with adulterate, dirtie, dark copper, but the wings gold, set off the body with the same; the breast with touches of silver, the wing with black: Lastly, let the tail be bright copper, and feathered with white, the bill and feet gold. Next, cover the Flies body with gold, his wings with bright copper, hatcht or set off with silver, the body with black. Make your Bird on the second Box-lid with gold, feather and shadow it with bright gold; let the wing be with vermilion and Lamblack mixt, till tis become a dirtie red; feather it with gold, the quills with silver, the beak gold, and the legs vermilion. Let the other Bird be gold in the body, feathered about the wing (as you may see in the Pattern) with black; the wing natural copper, feathered with white or silver; let the Flies be gold, and set them off with black. Beautifie the first Bird, on the lid of the Patch-box, with bright or red copper; hatch it with silver, touch it about the eye and head with black; make the wing of gold, feathered with black; the feet and bill of the same metal. The other Bird behind it must have green gold in the body, feathered with silver; the wing gold as the other, hatcht with black. On the other lid make the Bird gold, the wings bright red copper, feathered with white and toucht with black. The sides of each box may be contrived after the same manner: the sprigs deserve all to be laid in gold, as the rocks with different metals, and shadowed, but allow the outward strokes to be gold, not only as they confine, but as they adorn your work.

The Third Draught.

Before this piece can be adventured on, you are desired thus to make a paint or colour for the face and hands of the Figures. Grind white-lead finely on your Marble-stone; add as much Auripigment or Orpiment, as will give it a tawny colour; if you think it too lively and bright, allay it with Lamblack, which may contribute to a swarthy complexion, and nearest the Indian: but if you are inclined rather to a pleasant, flesh-like colour, a little vermilion or dragons-blood mixed with it, can to any degree oblige you. Now if you love variety of figures, you may use as many mixtures for their countenances; and distinguish the Master from the man, the Abigail from the Mistress by her tawny skin. Lay then the garment of your Figure in the first powder-box-lid in bright red copper; on that part which covers the breast, and encircles the neck, paint vermilion; let the cap and stick be of gold: set off the foldage of his vesture with silver, and close to each silver-thread join other of black; set off the black with the same. Lastly, strike out the lineaments of the face, and shapes of the hands, with black also: Let his Lacquey, the boy that attends him, have a golden livery,
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the bundle under his arm red, with a cap of silver. Set off the garment and cap with black, his parcel with lines of silver. Order the Bird and Flie to be overlaid with gold, and set off with black. As for your Sprig, the great leaves must be green gold and pale copper, border'd with bright gold; your flowers vermillion, encompass'd with silver, and feeded with the same; garnish the small leaves and stroaks with gold. The cover to the second Box should have its first figure attired in gold, where the black furrounds his neck, vermillion, the forepart of the cap the same, the hinder gold; his vest buttoned, looped, and drapered with black; the red of the cap and neck edged with silver, the gold of the cap hatcht with black; the feet bright copper, set off with silver. The other gentleman his companion, that he may have as good apparel as his friend, let his cap before be gold, behind green gold; set off the first part with black, the latter with silver, the covering for his neck with the same metal; his long robe will require green gold, set off with bright gold; his feet of the same, set off with black. The Flie and Bird just as the former, the Sprig in like manner, except the seed, gold, set off with black. The Figure in the first Patch-box may be arrayed in bright copper, hatcht or set off with silver; the cap and staff gold, the tree also. The figure on the other little box should have his upper coat vermillion, hatcht with silver; the under gold, set off with black; the stick, bird, and flie, gold; his feet, the colour of his face: The sprig, all gold, except the flowers, which may be red and silver, set off with black and silver. Let the sides be all gold, saving the rocks, which may be silver and copper.

Thus have I directed you in these methods of working colours, and how sparingly I have made use of them, for the least part of them is sufficient: and unless even these are workt clean, and with good judgment, it were more credit to omit, than insert 'em. But because some have a particular genius and inclination that way, I shall not make this Tract so incompleat as to forsake the treatise of them, and therefore to oblige universally the next Section is subjoined.

How to work in Colours and Gold the great Sprig in the XIIIth Print.

This has infinite variety, and by consequence will require the aid and assistance of very many colours, so that the Transparent ones may be here employed as well as the others.

First therefore trace out your design, and fill most part of the small work belonging to it, as the stems and little leaves, with gold, passing by however a few of them, to be reserved for bright copper, green gold, or the like; added too in such sort, that they may grace and enliven the piece: for tis the custom and fashion of the Japan-artificers, to fill frequently with dead metals, yet bind 'em in with gold. From these set upon the great leaves and flowers in the posture that they lie, and fill 'em by these directions, or any
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others of the like kind. But by way of example; The first great flower next the rock, half covered by great Leaves lying before it, I would fill the seeded part with silver, the leaves with vermilion, and in setting off, work it in black Diamond-wise, and those little spots of black which lie lurking in the white, with bright red copper; then the part that is fill'd with red, I should bind in with silver, and vein it with the same. From this I come to the other on the right hand, and fill the seed of that flower with bright copper, the leaves with silver, and when I come to set off, border the seed with black, the inside with silver, compass in the leaves with gold, hatching them with black. From hence I march to that on the left, partly hid by a great leaf: the seed of this shall be green gold, its squares bright gold, the spots in the squares vermilion, its leaves with dark heavy copper, set off with silver. Next for the three flowers that lie somewhat above this: that in the middle I would do with green gold, the seed bright gold, squared with black: the other may be laid with silver, seeded with bright copper, hatcht and squared with black. The last with vermilion, the seeds with transparent green, and enclose them with vermilion, and hatch in the leaves with silver. From these I would proceed to the other flower, opposite to them on the right hand, somewhat larger; whose seed must be red, bound in and chequer'd with silver, covering the leaves with blew, hatcht and surrounded with gold: the little one above that with red, the seed with blew, set off with silver. From these we make our progress to the two great flowers above them: the first may be laid with transparent blew, bounded and worked with gold, the leaves covered with silver, and hatcht with vermilion: the seed of the second with dirty copper, set off and encircled with silver; the leaf of the said flower clothed with deep bright red copper, hatcht with black. Next busie your self in filling the single great flower above that, whose seed may be dirty gold, environed and squared with silver; the spots in the squares done with bright gold, that part of the leaves that is white changed for black, and with gold hide the black that lies in the white: the remaining part of the leaf may be laid with bright red copper, bounded with silver, and hatcht with the same. As for the flower next above that, I would lay the seed in transparent red, set it off with silver, border it with black; then make the leaves silver, and hatch it with black. Afterward, the three above this, I would work in the same manner with the lowermost three; but that above all, may have his seed bright copper, compassed and set off with black; the leaves dirty copper, which might be hatcht and enclosed with white. Now remember, I beseech you, that although I have mentioned filling and setting off together, for the more easie apprehension of it, yet be constantly mindful to lay all your plain colours, before you think of setting them off; and the reason of it is this, because you are more ready to set off with one colour, before you undertake another, and your fancie is more quick

quick and ready to adorn and garnish every single flower and leaf. Now supposing the flowers filled, let us contrive what shall be the covering of the great leaves. But to be brief: Deck them with metals, generallly such as green, dirtie gold; pale, muddy copper; yet intermix here and there blew and green transparent: bound and vein 'em with such as give the greatest life; not wild, gawdy colours, so much as grave, modest, and delightful. I advise you sometimes to double your borders in the leaves, with the ground: black of the Box or Table left between, as the Print will inform you: And again, make all your veins, finishing lines, and the stroaks you set off with, fine, clean, even, and smooth. By this time I suppose, whosoever shall survey these last pages, may imagine we have pleased our selves with fancies and Chimæra's; that we have discours'd like men in a dream; nothing but Gold, Silver, and the richest colours can satisfie our luxuriant fancies; nay, we pretend to have it in such plenty too, that Solomon himself, compared to us, was a beggar: By our talk we are Masters of both Indies, Pactolus Sands, and the Mountains of Potosi should be our proper inheritance; for, like Midas, and the Philosophers stone, we turn every thing to Gold. Our Birds are so splendidly arrayed, that all common ornaments are excluded; the best Dyes so universally overspread their wings, that you'd imagin they would outshine the Bird of Paradise. The clothing and livery of the Fields are meane and heavy, when compared to the Flowers our Art has produced, whose lustre is more radiant, more durable, and surprizing.

CHAP. XVI.

To work in Gold-size the Twentieth Print of this Book.

Since our Gentry have of late attained to the knowledge and distinction of true Japan, they are not so fond of colours, but covet what is rightly imitated, rather than any work beside, tho never so finical and gawdy. The most excellent therefore in this Art copy out the Indian as exactly as may be in respect of Draught, Nature, and Likeness; in this performance then colours must be laid aside. Some variety of metals indeed may be admitted, but in a very slender proportion to that of gold, which is the *Fac totum*, the general ornament of right genuine Japan-work. This undertaking now in hand may be done with gold only; But I shall in the next Chapter choose a Print, whereon perfect and corrupt metals may be laid. To begin therefore with that of Gold: Be ever cautious and exact when you trace or draw out your design in vermilion or gold; which being performed with an even hand, call for your gold-size, ready prepared for the draught; use a small

convenient pencil, to mark in your size the outward lines, the boundaries of that rock, which in the twentieth Print you may perceive lies beyond the Buildings; and although you do begin here, you are not to fill it (either with metals or speckles,) until the other work is concluded; for, if you remember, we charged you before, to finish the Rocks in the last place. Again, if I may counsel you, begin with the remotest part, that which is farthest distant from you; for then you will not be liable to the inconvenience of rubbing, or defacing any thing whilst it is wet, with an unwelcome hand, or intruding elbow. Having therefore in short undertaken the farthest part first, work it just as the Print is; I mean, draw your gold-size on the black lines of the Print, and no where else; reserving the white for the black Japan or ground of your Table. But to explain it a little more: In all respects operate with your Size, as if you were to copy the Print on white paper with ink, or black Lead; only take care, that whilst you are busied in working one part, you suffer not that already done with size to drie to that degree, that it will not receive and embrace your metal, but very often try the draught so lately made: if it is clammy, and sticks somewhat to your finger, but not so as to bring off any, then tis high time with your leather to lay and rub on the gold-dust: if it clings to your finger so fast, as to come off with it, then know it is not sufficiently drie; if tis no way clammy, you may conclude tis too stubborn for the reception of the metal. This caveat, being rightly managed, set upon your drawing part again, and so continue, now making lines, then gilding them, until the whole be compleated. If you find it a tedious, troublesome undertaking to draw the white, and pass over the black; or, on the contrary, to draw the black and omit the vvhite on the tops of your houses, or foldage of figures, faces, or the like; then for your ease overlay all those parts of your building or foldage &c with gold-size, and when your metal is laid on that, and is well dried, wash over with Securing-varnish those places only which you design to set off with black: which done, exercise your pencil in making those lines and divisions that are required to distinguish the parts of your house, as the Tiling, Draperie of garments, or any thing of the like nature. The reason why we enjoin you to wash with varnish, is not out of any suspicion or jealousy that the size or metal will forsake its allotted seat, but because its surface is generally too smooth and greasy to admit of and unite with the black, unless reconciled by the mediation of the aforesaid varnish. What I have propounded is an example for any other Print, that you could wish or desire to accomplish in Gold-size: and indeed I had been very negligent, should I have permitted this noble subject to rest in silence and oblivion; this, which above all others presents us with the grandeur and majesty of Japan-work; our under-performances vanish and shrink away, when the Master-piece is exposed to view. Let the narrow-soul'd Miser hug and adore his
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bags, and pray to the golden Calf that he has erected, I shall neither envy or comply with his idolatry; for I had rather line my House with that precious metal, than my Coffers:

CHAP. XVII.

*To work in Gold-size the twentythird Print of this Book;
with perfect or corrupt Metals.*

THis draught requires a greater variety of colours than any of the precedent, without which it were no mean or ordinary performance to dress every figure in its proper habit, and equippe the attendance according to their respective qualities; but to shew what Art and Contrivance can effect, we have on purpose selected this Pattern, which was chiefly designed for colours, and intend to alter the property, converting it to perfect and mixt metals: so that if we overcome the most difficult, all meaner undertakings must by consequence yeild obedience and submission. Were I therefore allowed to prescribe in this affair, I would in the first place overlay the canopy and curtains belonging to it with pure gold, then flower, and set them off with black: the two streamers or flags may be done in bright copper, faintly shadowed with powder-Tin, or dirtie silver; for the best and brightest silver is to glaring a metal for black Japan, and very seldom if ever made use of, (yet I must acknowledge I have seen several Cabinets of Raised-work come from the Indies wrought altogether in Silver, but that is not authority sufficient for us to practise it in Gold-work.) As for the King, his face and hands should not be of the ordinary hue with inferior mortals; Gold best becomes his Majesties countenance, his eyes and beard black, his cap green gold set off with bright gold; his body may be cloathed in bright red copper, shadowed with black; the table-cloth covered with green gold, shadowed or set off with bright. The figure kneeling by him, should have his upper garment done in dirtie gold, shadowed faintly with dirtie silver, but his under in Powder-tin, hatcht with black; his feet with dirty copper. The bottom of the Throne, with the Ascent, you are to lay with gold, and set it off with black: The Ambassador first in rank approaching the throne, may be allowed the same metal for his face with his Majesty, and set off as his too with black; that on his shoulders and sleeves with bright red copper, shadowed with black; his present in his hand, gold, his cap green-gold, set off with bright; his feather behind it bright copper, set off with black; his body dirtie copper, shadowed faintly with dirty silver, or tin, yet flowered with bright gold; his feet bright copper, set off with black. The figure immediately following him I should clad in gold; the cap may be bright copper, all shadowed or
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set off with black; his present in his hand, his shoes and girdle, bright copper set off with black. The third Gentleman's face, hands, and feet, I would work in natural copper set off with black, that on his head powder-tin shadowed with black; the covering on his shoulders green-gold, spotted and hatched with bright gold. His outward apparel should be a lay of bright copper, set off with black; that in his hand, gold; his under-vestment the same, and hatch it with black. The last figure may have his hands, face, and feet, covered with gold, set off with black; the upper-garment with green-gold, flowered and set off with bright gold; the under, natural copper set off with black; that on his shoulder with bright, red copper, shadowed also with black. The body of the tree can be done with dirty gold, shadowed and set off as you see with bright gold; the leaves of the same. Lastly, the fruit, bright copper, and hatcht with black.

Thus may you work with Metals only, and vary it according to your fancy. And you may set off your plain metals, when rubbed on Gold-size, either with Metals mixed with Gum-water, or Gold-size; that is, when your plain Metals are layed, and thoroughly drie, hatch or work in the Size for setting off, as you would do with Metals mixed with Gum-water. You may use which you please, but tis my opinion that Gold-size is best.

I had rather see an Embassy thus in Miniature, than take a voyage into China that I might really behold one: not that we have too richly attired his Majesty, and the Ambassadors, or given them more magnificent habiliments than ever they bestowed upon themselves. Whether the King is desired to join in the league against the Tartar, or to stand Neuter, I cannot truly determine; but by those weighty reasons, the Golden Presents, we conjecture that he may be bribed, and brought over to the party. The Agent seems very zealous in the business; what will be the issue and event, lies not in my power to foretell at present; nay, if you should have patience to tarry till the revolution of the Platonick year, when every thing shall be in the same posture it is now, even then by consequence we should be ignorant of it. This indeed I can assure you, I have known these Politicians nigh ten years, and never saw them yet in any other manner than what the Picture represents; and do therefore imagin, that there are no hopes of an amicable and sudden conclusion.

We however shall now fix a period to this Treatise of Japan, as you may perceive by our giddy discourse, which seems to imply, that we have nothing more to say to the purpose. Yet give me leave, kind Reader, to offer something before we take our formal leaves of this subject. Many excellent Arts are buried in oblivion, which must certainly be ascribed to the neglect of the skilful, who never committed them to posterity by the useful convey-

veyance of Manuscript or the Press ; Painting of Glafs , and making it malleable, may serve for instances of Arts that have miscarried, either through the laziness or ill nature of the Artists, who would not communicate their ingenuity to after-ages, or else through envy denied it a longer date than themselves, and foolishly resolved it should not survive them. Short-sighted ignorants ! as if their fame and memory could die whilst their Arts thrived, or that their great Grand-sons should admire the invention, without entertaining a just esteem and deference for its Author. Yet I would not have you mistake me, and surmise, that I have made a circular Preamble, to hook my self into the circumference ; for I proposed this Tract as a means to perpetuate my Art only. I must confess, I have too great an Esteem for this Pallas of mine, then in the least to slight or neglect it ; and I think my self obliged to make as good a provision for the issue of my Brain, as that of my Body ; for the first is entirely my own, but I am forc't to admit of a Partner in the generation of the latter. I shall never be solicitous for my self, and look upon Applause to be as empty and insignificant after death as before it ; and am not in the least ambitious to live by another's breath, when I am deprived of my own. If I may be allowed to bestow a hearty Wish, it must be for its Success, that it may flourish and be admired ; that from these lines, as from the Serpents teeth which Cadmus sowed, may spring experienced Artists, that will invest it with splendor and reputation ; yet with this difference from the parallel, that they may mutually conspire to establish and eternize it.

THE ART OF
GUILDING, LACKERING, &c,
display'd.

CHAP. XVIII.

*To guild any thing in Oyl, whereby it may safely be exposed to
the weather.*

WE have hitherto uttered big and glorious words, hardly a Page that has not ecchoed Gold and Silver ; but if you'll pardon us, we will frankly and ingeniously confess, that the expressions are as valuable as the things : for Brass-dust, and viler metals have been thus disguised to counterfeit the more noble and excellent : yet it cannot be denied, but that they are such cunning cheats as may almost impose upon the skilful and ingenious. And this may be said in their behalf, That although they deceive the eye, they neither pick or endanger the purse, which true gold would do after a most profuse and unnecessary manner. Well then by way of requital we shall cast away the vizor, and lay aside the mimick dress ; for the Art now in hand will not admit of the former couzenage. Guilding accepts not of base materials, is wholly unacquainted with dross or allay, and the finest unadulterate gold is the only welcom and acceptable guest. I am sensible that the Guilders on metals will quarrel at the name, who pretend, that Guilding is a term appropriated to the working on Metals only ; but the dispute is equally trivial, and unreasonable : for if I overlay Wood or any other body with Gold, I cannot conceive how I transgress the rules of common sense or English, if I say, I have gilded such a wood ; and I shall therefore acquiesce in this title, until the frivolous Enquirers furnish me with a more natural and proper appellation. However, since some of that profession have upon this occasion disputed the title with me, though to no purpose, to shew that I can and will be as good as my word, I'll give you their way of Guilding of Metals in full to end the dispute. But to the business in hand : I shall here instruct you in all things necessary for this way of Guilding, as Primer, Fat Oyl, and Gold-tize, all which are to be gotten at the Colour-shops. Priming may be

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afforded for 6d. the pound, the other two will cost each of them 3d the ounce: but because they are scarce commodities, and seldom to be met with very good, tis requisite for those who guild much, to make it themselves, after this manner.

To make Priming.

Priming you may make of any colour that hath a body; as white-lead, brown or red Oker, and Umber, ground in oyl pretty light: but the Painters have the best conveniency for this composition; for tis made of the scraping of their pots, the oldest skinny colours, and the cleansing or filth of their Pencils. All these being mixed grind very well, put them into a canvas-bag that will hold a pint, fowed very strongly for this purpose. If the colour be too dark, it may be alter'd by adding a little white-lead. Being securely inclosed and tied up, press it between a pair of Screws, such as Apothecaries employ, now and then turning the bag, until all the fine primer be squeezed out, which should be received into a Gallipot, the skins and filth that remain are useles, and may therefore be thrown away. With this your piece must be very thinly primed over, and permitted to drie.

Fat Oyl

Is nothing else but Linseed oyl, managed thus. Put it into leaden vessels, shaped like dripping-pans, but so, that the oyl may not be above an inch deep. Set them out exposed to the Sun for five or six months, until it become as thick as Turpentine, the longer it stands the more fat it will be, and by consequence the Gold will require a better gloss; if it arrive to the consistence of butter, that it may be almost cut with a knife, reserve it carefully, and as the best for use that can possibly be made.

Gold-Size in Oyl.

Provide the best yellow Oaker, see it very finely grinded and thick with Linseed-oyl, which is something fat. This done confine them to a pipkin, and put on it some fat oyl, to keep it from skinning over: cover it with paper, or a bladder to guard it from dust and injury; lay it aside for your occasions. You may use it presently, and if you keep it seven years twill come to no damage, but on the contrary be much better for your purpose. Should it happen that you might have old gold-size that is skinny, and yellow and brown Oaker in the same condition, grind them, shut them up in a clean Canvas bag; press it between your Screw as your Primer was, until you have made a separation, and parted the good and serviceable from the bad and insignificant; a Gallipot is a fit receptacle for the first, and the dunghil for the latter. This sort of Gold-size is ready to serve your present and more urgent necessities; if you desire to have a piece extraordinary, I advise you to prime it thinly over once more, allowing it four or five days to drie, if your business will permit, if not, instead thereof Lacker over your work in the
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Sun, or some such moderate heat, and then tis rightly prepared for the reception of the Gold-size.

How to mix, and lay on Gold-size.

Take of the best Gold-size, and of fat Oyl, an equal quantity, yet no more than your piece requires. Mix and incorporate them well together by the means of your Stone and Muller, and put them into a pot; procure a clean Brush that has been formerly used, and with it dipt in the Size pass over all the piece very thinly, jobbing and striking the point of the pencil into the hollow places of the carved work, that no place, creek, or corner of your work may escape the salutation; for every part of your Frame or thing that hath not been partaker of the Gold-size, or touched with it, is not in a condition to embrace or receive your Leaf-gold; so that if care in this be wanting, your work, when it comes to be gilt, will be full of faults, and look scurvily. Having thus done, remove it to a convenient place for twenty four hours, free and secure from dust; the longer it stands, the better gloss your Gold or Silver will be adorned with, provided that it be tacky and clammy enough to hold your metals. Now to distinguish the true exact time when the Gold-size is fit to be gilded, breath on it; if your breath covers it over like a mist, tis evident that you may lay on your Gold; or otherwise, press your finger upon it somewhat hardly; and if you perceive tis so drie, that it will neither discolour or stick to your finger, but is in some measure clammy, tacky, and unwilling to part with it, conclude tis in a good condition: should you attempt to gild before the Size is drie enough, that moisture will drown and deprive your Gold of that gloss and lustre which it would acquire if skilfully performed; on the contrary, if the Size is over-drie, you are come too late, you have lost the opportunity, for it will not accept of the Gold. The first miscarriage of being too moist, is rectified by suffering it to stand one day longer to drie; the latter, which is so drie and stout, that it will not receive it, must be confined to a damp cellar for a night, and then without question twill willingly accept of the golden Bribe.

Of laying on the Gold, and the Tools required for the business.

You are desired in the first place to furnish your self with a Cushion made of Leather stufft very even with Tow, and strained on a board 10 inches one way, and 14 the other. On this you are to cut the gold and silver with a thin, broad, sharp, and smooth-edged knife: To these, three or four Pencils of finer hair than ordinary; some are of Swans-quills, and sold singly for 6d. the Artists use also the end of a Squirrels tail spread abroad, and fastened to a flat pencil-stick, which is broad at one end, and split, just like an house-painter's Graining-tool, but less; it serves for taking up and laying on whole Leaves at a time, and is by them called a Pallet: Cotton is also requisite, and some use nothing else. The Guilders

commonly border their Cushion at one end, and four or five inches down each side, with a strip of parchment two inches high, intending by this fence and bulwark to preserve their Gold from the assaults of Wind, and Air, which if moved never so gently, carries away this light body, which willingly complies with its uncertain motions. Experienced Artists frequently shake a whole book of Gold into this end of their Cushion at one time, and with their knife single out the Leaves carefully, and either spread them whole on their work, or divide and cut 'em, as the bigness of the place requires: but I would not advise young beginners to presume so far, as to operate this way, but venture upon a leaf or two at once, cutting it as above directed. Next, handle your Pencil or Cotton, breathing on it, with which touch and take up the gold; lay it on the place you designed it for, pressing it close with the said Pencil or Cotton. Thus proceed, until the whole be finished and overlaid; then cut some leaves into small pieces, which may cover several parts of the Frame that have escaped gilding. Having laid it aside for a day, call for a large fine hogs-hair-brush; with this jobb and beat over the work gently, that the gold may be pressed close, and compelled to retire into all the uneven, hollow parts of the Carving: Afterwards brush all the Leaf-gold into a sheet of paper for sale. Lastly, with fine soft, Shummy leather, as it were polish, and pass it over. These Rules being strictly observed, your undertaking will be artificially concluded; 'twill appear with a dazling and unusual lustre, and its beauty will be so durable, so well fortified against the injuries of wind and weather, that the attempts of many Ages will not be able to deface it.

To Lack in Oyl, such things as are to be exposed to the Weather.

In this I request you to observe the very method prescribed before for gilding, with this difference, That your Primer be more white than the last, which is effected by mixing a little White-lead, that has been grinded a long time, amongst the former Gold-size; farther considering, that your Silver-size ought not to be so drie as that of Gold, when the leaves are to be laid on. These two remarks being rightly observed, go on with your design in every particular as afore said, and you cannot possibly miscarry.

To prepare and guild Carved Frames in Oyl, that are not to be exposed abroad.

Provide a pipkin, in it warm some Size pretty hot; bruise with your hand, and put in as much Whiting as will only make it of the same white colour. Size over your Frame once with it, then add more Whiting, until tis of a reasonable consistence and thicknes: With this lay it over three or four times, as you find it deserves, granting it time to drie sufficiently between every turn. Now take a fine Fish-skin or Dutch-rushes, and smooth your Frame with 'em;

'em; when so done, you may with a rag, or finger dipt in water, smooth, or, which is the same thing in other words, water-plain it to your mind; let it drie. After this, with a small quantity of strong Size, Cold-clear it; which is a term and name Artists make use of in this case to express themselves by, but is no more then if I had said in short, Size it over: when this is dried, Lacke over your piece by a gentle heat two several times. To conclude, lay on your Gold-size, and perform every thing required in the foregoing instructions.

CHAP. XIX.

To overlay Wood with burnisht Gold and Silver.

IN order to this work Parchment-size must be provided, which is made thus. Take two pounds of the cuttings or shavings of clean Parchment; the Scriveners vend it for 3d. the pound: wash and put it into a gallon of fair water, boil it to a Jelly, then strain, and suffer it to cool, and you will find it a strong Size. This may be used in white Japan also, instead of Hing-glass-size. When you intend to imploy any part of it about the business in hand, put a proportionable quantity into an earthen pipkin, make it very hot, remove it then from the fire, and scrape into it as much Whiting as may only colour it; mingle, and incorporate them well together with a clean Brush. With this whiten your Frame, jobbing and striking your Brush against it, that the Whiting may enter into every private corner and hollownes of its carved work; give it rest and leisure to dry. Melt Size again, and put in as much Whiting now as will render it in some degree thick; with it whiten over your Frame seven or eight times, or as you think best, striking your pencil as aforesaid; never forgetting this caution, to grant a through-drying time between every turn by the fire or Sun: but after the last, before tis quite dry, dip a clean brush in water, wet and smooth it over gently, and rush it smooth when dry if you find it necessary. In the next place, with an instrument called a Gouge, no broader than a straw, open the veins of the Carved work, which your Whiting has choakt and stopt up. Lastly, procure a fine rag wetted, with which and your finger gently with care smooth and water-plain it all over; and when tis dry, tis in a capacity to receive your gold-size; of which in the following Paragraph.

Of Gold and Silver-size for Burnishing.

Gold-size is the chief ingredient that is concerned in this sort of guilding, and tis a difficult task to find the true quantity of each distinct thing that is required to make up the composition; and the

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reason of it is this, because you are compelled to vary and alter the proportions, as each season changes its qualities of moisture and dryth; for the Summer demands a stronger Size than the Winter. The most experienced are uncertain, when they make the Size, whether 'twill answer their intentions, and suffer them to burnish on it; therefore to know infallibly how 'twill endure, they lay some of it on the corner of a Frame, and cover it with Gold or Silver; now if it does not burnish well, but is rough, and inclined to scratch; add more grease or oyl, yet avoid too large a quantity. And seeing tis no easie matter to hit right, and nick the due required mixture, I shall lay down several ways to make it, which I have not only experienced my self, but are now practised by some of the chief Professors of it in London.

The best way to make Silver-size

Get in readines fine Tobacco-pipe-clay, grind it very small; if you please, mix as much Lamblack as will turn it of a light ash-colour; add to these a small bit of candle-grease, grind 'em together extraordinarily fine, granting a mixture of size and water; then try it as before directed.

The best Gold-size now in use.

Take of the best English and French Armoniack an equal quantity, grind them very finely on a Marble with water, then scrape into it a little candle-grease, incorporate and grind all well together. Again, mix a small quantity of parchment-size with a double proportion of water, and tis all concluded.

Another Size for Silver.

Provide fine Tobacco-pipe-clay, grind a little black lead with it, cast in some Castile-soap, grind all of them together, mixing them with a weak Size, as we taught you in the last account of making Silver-size.

A size for Gold or Silver.

Take two drams of Sallet-oyl, one dram of white wax, put 'em into a clean gallipot, only dissolve them on the fire; to these, two drams of black Lead, and near a pound of Bole Armoniack, grind all very finely together, mixing with them also size and water. Remember that I desire you never to grind more gold or silver-size, than will serve your present necessities; if you transgress, and imagin 'twill be useful another time, believe me you'll be deceived when you come to make tryal: more ample and full directions experience will dictate to you; what follows, may be advantageous and instructive in the preparation of your work. In order to gold-size it, If the subject you are to work on be a carved Frame, and you propose gilding it, take yellow Oaker, grind it finely with water, add a little weak Size to bind it; when warm'd, colour over your Frame, pass by no part of it, permit it to dry leisurely.

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To Gold-size your Frame.

Employ either of the former Gold-sizes, yet I am rather inclined to the first; melt it, so that it be only blood-warm, stir it well with a fine brush; as for its condition, let it be somewhat thin. With this, size over the Frame twice, but touch not the hollow places or deepest parts of the Carving, where you cannot conveniently lay your Gold, for the yellow colour first laid on is nearer in colour to the gold, so that if in gilding you miss any, the fault will not so soon be discovered. Allow it a drying space of four or five hours, and try if the gold will burnish on it: if not, alter your gold-size, and do it over again, and when dry, thus cover it with.

To lay on Gold for Burnishing

Having set your Frame on an Hasel, or fixt it in some other place, in an upright posture that the water may run off, and not settle in any of the hollownesses, lay some leaves of Gold on your Cushion, which you are to hold in your left hand, with the Pallet and Pencil: also tis convenient to have a bason of water at your feet; as likewise dry Whiting, to rub your knife with some times, that the gold may not cling to it. All these being advantageously placed, and in readiness, advance forward, and after this manner set upon the work. Produce then a Swans-quill-pencil, or a larger tool of Camels-hair if the work require it: this being dipt in water, wet so much of your Frame as will take up three or four leaves, beginning at the lower end, ascending and gilding upwards, laying on whole leaves, or half, as your work calls for them, for your own interest contriving how you may bestow 'em without waste, which is the principal concernment a Gilder ought to be vigilant and circumspect in; and that darling-metal, which we foolish Mortals covet, nay almost adore, is certainly too pretious to be lavishly consumed, and unprofitably puff'd away. Then wet such another part of your work, and lay on your gold, with your Pencil or Cotton pressing it gently and close. By these regular steps and motions having gilded the two upright sides of your Frame, turn it, and proceed to operate after the same manner by the remaining upper and under part. If your work be sufficiently moist, you'll perceive how lovingly the gold will embrace it, hugging and clinging to it, like those inseparable friends, Iron and the Loadstone. I enjoyn you, after the gilding of one side with whole, or half leaves, or large pieces, as your work requires, to make a strict enquiry, and review those many little spots and places, which, like so many Errata, have escaped the Pencil, and may thus be regulated: Cut some leaves of gold into small pieces, and with a smaller pencil than before wet the ungilded parts, and take up bits of gold proportion'd to the places that stand in need of it; this last performance we call, Faulting. All these things being done, let it stand till to morrow that time, and no longer, for

if you transgress, especially in the Summer, you'll find it will not burnish kindly, or recompense your trouble by giving you ample satisfaction.

To Burnish your Work.

A dog's tooth was formerly lookt upon as the fittest instrument for this business; but of late Aggats and Pebbles are more highly esteemed, being formed into the same shapes, for they not only have a fine grain and greet, which conduces to, and heightens the lustre of the gold, but besides it makes a quicker dispatch, for by these means those narrow tedious strokes are prevented in this burnishing, and is performed with greater expedition. These Pebbles are each valued at 5s. I do therefore prefer and recommend 'em before dogs-teeth. Having burnisht so much of your work as you design, leave the ground of your Carving untoucht, and some other parts as you think best, which being rough in respect of the other, sets off and beautifies the burnishing: that which is not burnisht, must be matted or secured with Size, Seed-Lac-varnish, or Lacker, if you desire it deep-colour'd; and pray confine it to this part only, let not your unsteddy hand wander or transgress its bounds, and upon no account approach the burnishing. Then the work must be set off or repossed with Lacker, mixt in a gallipot with Dragons-blood and Saffron, or a colour called, Ornator; into which a fine pencil being dipt, with it touch the hollownes of your Carving, the hollow veins of the leaves and foldage, if you imagin tis not deep enough, make it so by a repetition; some I know use Vermilion in Size, but I declare I am not reconciled to it, for tis not so pleasant and agreeable to the eye.

To lay on Silver-size.

Take Silver-size that's newly ground and mixt with weak Size; warm it as your Gold-size was, and with a clean pencil, of a bigness suitable to the work, size over the same once or twice. Let it drie, and if your Silver will burnish on it, tis sufficient; but on the contrary, if it will not, we advise you to an alteration. Next, wet your work, lay on your Leaf-silver after the method for Gold directly, without any alteration, and burnish it all over.

Now before we part with this subject, I shall in brief lay down a few Rules to be observed by all Practitioners. And

1. Let your Parchment-size be somewhat strong, and keep it no considerable time by you; for 'twill not then be serviceable.
2. Grind no more Gold or Silver-size, than what may supply your present necessities.
3. Preserve your work clean and free from dust, before and after tis gold-sized, and gilded, otherwise 'twill be full of scratches in burnishing.

Lastly, never attempt to whiten, gold-size, or burnish it, in the time of a hard frost; for your Whiting will be apt to peel off, the
Gold

Gold and Silver-size will freez in laying on; not to say any thing of other misfortunes that attend the unseasonable operation.

CHAP. XX.

To make good Paste, fit to mould or raise Carved work on Frames for Gilding.

I Acknowledge this to be utterly useles, on supposition those persons who want Frames lived at London, or had any convenient commerce with, and conveyance from, that City; because Carved work is there done very cheap and well: but I consult the wants of those who cannot be supplied from thence, or any other place where Artists reside, who may afford 'em at reasonable rates. In this strait and exigency, therefore carve your Frames your self, after this method. If you understand Modelling, or desire to make Models on which your Moulds shall be cast; take good, tough, well tempered Clay, and with your tools model and work out any sort of Carving which you fancie: lay it aside to drie in the shade, for either fire or Sun will crack it. When tis firmly dry and hard, and you intend to cast the Moulds on the Models, oyl your models over with Linseed oyl; work the paste briskly between your hands, clap it on, and press it down close every where, that it may be a perfect mould in every part; and tis no sooner dried, than finished.

To make Paste.

Steep as much glew in water as will serve you at present, then boil it in the said liquor; make it stronger than any size, yet something weaker than common melted glew: bruise and mix whiting very well with it, until tis as thick and consistent as paste or dough; knead it very stifly, wrapping it up in a double cloath, in which it may lie and receive some heat from the fire; if you permit it to lie in the cold and harden, twill render it unserviceable.

To make a Mould of any Carved Frame, thereby to imitate it in Paste.

Take a piece of paste more or less according to the length or largeness of the leaves and flowers you take off; twould be idle and fruitless to take off the whole length, for you'l find one bunch of flowers, perhaps six or eight times in one side of a frame; so that one mould may serve all of that sort, provided they are artificially united and joined together. Work then the paste between your hands, clap it on that part of the frame which you design to take a mould off; let there be paste enough, that the back of the mould may be flat and even. While the mould is warm take it from the frame, and at the same instant with a weak glew fix it to a board that is larger than it self. Thus may you take off any other small
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fort of Carving, not only from the inside and edge, but any part of your frame, glewing all your moulds on little boards, and giving them leisure to drie and harden.

Of placing Paste or Carved work on Frames.

Every Joyner can make frames for this purpose, which sometimes are very plain mouldings, either half round, ojee or flat; for there may be some little hollownes and ojee, or what else you please, allowed of, on the sides of the paste-work. When your frames, paste, and moulds are ready, oyl the moulds very well with Linseed-oyl, striking the brush into every little corner, for this prevents the moulds sticking to the paste. Then use as much warm paste as will fill up the mould, work it again between your hands, and whilst it is thus warm, and in good temper, put it into the mould, pressing all parts with your thumbs; next, with a knife cut off the superfluous paste even with the top of the mould: turn out your newly fashio'd carved work on your hand, and before it cools glew it, and the place tis design'd for, with thin glew; clap it on your work in the very place you intend it shall always abide, pressing it gently. Then oyl your mould again, work your paste, cast and place it as before: this must be repeated, until the whole be accomplished, and the frame is to your content filled with carving. Grant it four or five days to dry in, after which time you may safely whiten it. On these sorts of frames you may guild in oyl, or burnish, but to the latter it is chiefly accommodated.

CHAP. XXI.

Of LACKERING.

Lackers are composed several ways, and differ as variously in their value and goodness, which admits of degrees, according to the method and materials out of which they are produced; yet they have common to them all in which they universally agree, the famous ingredients, Spirit of Wine, and Seed or Lac-shell-varnish; but their Colour and Tincture for all this differ extreamly. Some boil their Lacker, whilst others (who are more in the right) are not beholding either to Fire or Sun. They who through ignorance dissolve it by fire, are in the first place to be excused, as also when they cannot rise to the price of good Spirits, strong enough to dissolve the Seed or Shell-lacc without fire; but because some may be willing to save charges, and others desire indifferent Lacker only, take along with you directions for them both.

To make common Lacker.

Take one quart of Spirit, put it into a Pottle-bottle; of Shell-Lacc eight ounces, beaten small enough to enter the bottle; shake 'em well together; having stood till quite dissolved, strain it, and reduce to powder a small quantity of Sanguis Draconis, which with a little Turmerick tied up in a rag put into it, grant it a days continuance in that posture, at your leisure hours shaking it. You may alter the colour, heighten or abate it, by adding or diminishing the quantity of the two latter ingredients.

Another sort of Lacker.

Use the same quantity of Spirit of Wine and Shell-Lacc as before; when dissolved, strain it; but, to give it a tincture, instead of common Dragons-blood and Turmerick, employ a very little Sanguis Draconis in drops, and Saffron dried; which bruise, and cloath with a piece of linnen, and manage it as the other, by putting it into the vessel. If you desire the Lacker of a deeper or more copperish colour, add more Sanguis; if the contrary, Saffron. These being shakt well, keep close stopt for your designs.

To make the best sort of Lacker now used by the Guilders.

Some use Shell-lacc-varnish only for this Lacker, but Seed-lacc is much better, the composition of which you are taught in the 8th page. Take therefore of this seed-lacc-varnish, a quantity answerable to the Lacker, which give a tincture to after this manner; Take the colour called Ornator, ground and reduced to a very fine dry powder; mix it and some of the varnish in a gallipot, stir and dissolve it over a gentle fire; after this confine 'em to a viol closely stopt. Take likewise three or four ounces of Gambogium, which I would have bruised, dissolved on the fire, and kept in a vial as the other. To a quart of this varnish, if you please, two penniworth of Saffron dried and bruised may be added; to these, five or six spoonfuls of the Ornator, and a double portion of Gambogium-varnish: being shaken well together, try it on a little bit of silver, or a small frame; if it appears too yellow, afford more from your Ornator, but if too red, from your Gambogium vial: by these contrivances you may continue the mixture until you arrive at the true golden colour, which is the only excellence we design and aim at.

To make a Lacker, that may be used without Fire or Sun.

To a quart of the aforesaid Lacker allow 2 penniworth of Venice Turpentine; mix and incorporate them very well. With this you may lacker any thing in the open Air, and although it may

The Art of Gilding, Lackering, &c.

that dull and misty immediately after every lackering, that fright, that seeming discouragement, will quickly vanish; that thin cloudy vapour, will be dissipated by its sudden, and piercing lustre.

To Lacker Oyl, Size, or Burnisht Silver.

Let your Frame or work be warmed before you lacker it; and when some of your Lacker is poured into a large Gallipot, with a fine large Brush, that does not drop any of its hairs, made of Hogs or Camels-hair, be quick and pass over the piece, carefully contriving to miss no part, or to repass another that has been already lackered; but in a manner observe the same rules here, that are given for Japan, yet with these exceptions in lackering Carved work; for then you must be quick, and strike or jobb your brush, thereby to cover the deep parts also: Be sure to lay it thin and even, and presently warm it by the fire whilst it looks bright, for by these means you may lacker it again in a quarter of an hour, warming it before and after the operation. If two or three varnishings will not produce a colour deep enough, oblige it with a fourth; but remember, if you should carelessly do it too deep, all assistance will be insignificant, and no remedy whatsoever will avail you.

To make Lackering shew like Burnisht Gold.

If you are careful and neat in burnishing your silver, and have graced your Lacker with a true gold-colour, have with an even hand laid it no thicker in one place than another; then Matt and Reposse it, as you do burnisht gold; and unless narrowly surveyed, twill put a fallacy upon and deceive curious, discerning eyes. Matting is only the ground-work of your Carving altered, or varnishing it deeper and more dull than the other part of the Frame: Repossing is done with Lacker and Ornator, (which latter the Drugsters sell at 4d the ounce,) with these mixt, touch and deepen all the hollow deep places and veins of your work; for it adorns and sets it off admirably well, by its colour and reflection.

CHAP. XXII.

Of Gilding Metals.

I Acquainted you before with a controversy between the Guilders, concerning the Terms of Art, who denied the name of Gilding to that of Wood, and confined it to Metals only: upon which account we promised you to treat of the latter too, and thereby comprehend both; although tis no question but one laies as just a claim to that title as the other. They are certainly fine inventions, that serve to please us with the shadow, when the substance can-

can't be purchas'd. We are all of us great admirers of Gold, and by consequence must be enamoured with Gilding, which is so nearly related to it. For Gilding is Gold in Miniature, with which as with a golden Ray, we beautify and adorn our viler Metals. Its preparation therefore must first be discovered, before we can proceed to the use and performance.

To prepare Gold.

Take Leaf, or fine Ducket-gold, which is more excellent for this use, of either what quantity you please; but be sure that the Ducket be beaten very thin: put the gold, and as much quick-silver as will just cover it, into a gallipot. Let them stand half an hour, presently after the mixture stirring them with a stick. This time being expired, strain 'em through a piece of leather, squeezing with your hand, till you have brought out as much quick-silver as will be forc't through by all your industry. Now that which remains in the leather looks more like silver than gold, yet tis that, and that alone which must be employed in the succeeding operation

To gild Silver, Copper, Brass, or Princes-metal.

Whatsoever you design for gilding, should be first well scrubbed with a Wier-brush, sold by the Iron-mongers. Wet the piece with water or beer, and continue scrubbing and wetting it, until all filth and dirtiness be fetcht off, that the two metals may more closely hug and embrace each other. This being cleans'd, make ready quick-silver, by mixing it with a very small quantity of Aqua fortis in a vial, which should always stand by you; three or four drops only of Aqua fortis, is sufficient I assure you for an ounce of quick-silver. With this quicken your work, that is, with your finger or a fine rag rub this mixture on your metal, till tis all over-silvered or toucht with the said quick-silver. This done, call for your gold formerly prepared, and with an iron-tool or little knife fit for the purpose, spread or overlay the whole work, being careful to miss no part, under the penalty of doing that place over again, after you have given it an heat over a fire, which you must do when the gold is laid, to compel the Mercury or quick-silver to evaporate and flie away, leaving the gold fixed and adhering close to the piece. But before you give it a through heat, let it have two or three little heats, that you may with a hair-brush, like that of a comb, dab and spread your gold, which by the little warmth you gave it, makes the quicksilver also more ready to spread. After these two or three visits made to the fire, give it the thorough-heat at first mentioned: then take it from the fire, and with a scrub-brush, that has never been toucht with quicksilver, clean it, as you did in the beginning. Now, if you perceive any spot of quicksilver untoucht, you must lay your gold upon it again: when tis cleaned with the scratch-brush, you may after this manner heighten its colour, if you think convenient.

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Take of Salt, Argal, and Brimstone, an equal quantity; mix them with as much fair water as will cover the thing when put into it; boil them over the fire, and having tied your gilded work to a string, put it into the boiling liquor for a little space, looking on it every minute, and when it has acquired a colour that pleases you, dip it in cold water, and the whole is finished. But still if you would have the work more rich and lasting, you may again quicken it with quicksilver and aqua fortis, and gild it over again after the former method, and repeat it so often, if you please, till your gold lies as thick as your nail upon the metal.

Another way to gild Silver, Brass, or Princes-metal.

First, brush over your silver with Aqua fortis, then quicken your work with Mercury as before taught. Let your gold be beaten thin, and put into a Crucible, with just so much quicksilver as will cover it, and let it stand till it begin to blubber: then strain it through a piece of leather as before, and the quicksilver will go through and leave your gold, but discoloured, as hath been said; then lay it on with an iron-tool, and in every thing do as you were taught in the other gilding.

Another way to heat, or heighten, the Colour of your Gold.

Take Sal Armoniack, Salt-petre, Sandiver, Verdigrisee, white and green Vitriol, grind them with white-wine vinegar, which lay all over your work; then lay it on a fire, and give it a small heat that may make it smooke, and then take it off and quench it in urine.

To take off Gold from any gild Plate, without the damage of one, or loss of the other.

Put as much Sal Armoniack, finely beaten, into Aqua fortis, as will make it thick like a Paste; spread your Plate all over with it, put it into the fire, give it a thorough heat, neal it, or make it red hot; then quench it in fair water, and with a scrub-brush scratch and scrub the Plate very well, which will fetch off all the gold into the water. After a little time standing quietly, pour off your water, and the gold will be to your satisfaction found at the bottom; if all the gold be not come off, do the same again. As for cleansing this plate, or any other, which we call, Boiling of silver, first, make your plate red hot, let it stand till tis cold; then mix Argal and Salt with water, when it boils, put in your plate, keeping it there for a quarter of an hour: take it out, and when washed and rinsed in fair water, you'll perceive by its beauty that tis sufficiently changed.

To Silver-over Brass or Copper, as the Clockmakers do their Dial-plates.

Having Leaf or burnt-silver in readiness, put it into as much Aqua fortis as will cover it; after an hours standing pour off the Aqua fortis as clean as may be from the silver; wash the silver
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three or four times with water, let it dry, and then mix it with one part of fine Argal to three of silver, with a little fair water. When you make use of it, rub it on the work with a cork, until tis all silvered, and lie as fair as you could wish. Next, dry it well with a linnen cloth, and having made it warm, wash it over three or four times with the best white varnish, spoken of in this book; and it will not fail to secure it from Tarnishing, and other injuries.

To guild Iron, Brass, or Steel, with Leaf-gold or Silver.

If you are to guild Brass or old Iron, you must cleanse it very well with a Scratch-brush, before you hatch or guild on it; but for new Iron or Steel, after you have filed it very smooth, take a hatching-knife, (which is only a knife with a short blade and long handle,) and hatch your work all over neatly; then give it an heat, whilst it looks blew, on a charcoal fire, from whence take it and lay on your gold or silver, and with a sanguine-stone burnish it down a little; then give it the same heat and burnish it all over. Thus may you repeat three or four, or half a dozen, or a dozen times if you please, still observing to give it the same heat before and after you lay on your gold or silver, and burnish it. This leaf-gold and silver is much thicker than the other, and four times as dear.

To refine Silver.

Take Silver, be it never so coarse, and melt it in a melting-pot; then cast it into water, to make it hollow; after tis cold take it out and dry it, mixing one ounce of Salt-petre to a penni-weight of Antimony, (so proportionably greater quantities, if you have occasion.) These with your Silver confine again to a melting-pot, covering that with another, very closely luting them together with loam, made of clay and horse-dung. The two pots being thus cemented, put 'em into the fire, and give them a very strong heat, after which remove them to a cooling place. Break the pot when cold, and you'll perceive the silver fine at the bottom, but the scorio and dross on the upper part like a cinder. Copper may be separated from Gold after the same manner.

To separate Gold and Silver, when incorporated, with Aqua fortis.

Take as much Aqua fortis duplex, as will something more than cover your metal, in a strong vial or parting-glass. Put it on sand over a gentle fire at first, with the glass open and unstopt; for if tis closed twill break in pieces, as may also a fierce fire at the beginning: by degrees therefore increase its heat, till you make the Aqua fortis simmer and boil; continue so doing, till your metal be dissolved. This done, pour the Aqua fortis gently into water; the silver will invisibly go along with it, but the gold remain at the bottom of the glass; which gold, when well washed with

water, you may melt down, or preserve for gilding metals, by mixing it with quicksilver, and straining the latter through leather, as you were instructed by Leaf and Ducket-gold.

Now to reduce the silver into its former body which appears to be a water, and so would remain many years, unless you take this method for its alteration; pour the said water (wherein your silver is floating like undiscernable Atoms) into a copper vessel, if in any other, put in copper-plates; and immediately all the silver will repair to the copper, like an army to their posts at beat of drum, so that in two or three hours time (that small parcel of silver, which hath been separated into parts more innumerable than the Turks army will be this Campagne) you'll find all hanging and clinging so lovingly to the copper, and as loth to part as we from our Mistresses, tho they're sometimes more unconstant to us than the silver is to the copper, for no other metal can tempt it to the same compliance. The same silver so gathered you may use for silvering any metal, doing with it as is here taught of the gold, or instead of leaf or burnt silver dissolved in Aqua fortis, as was before said in Clockmakers silvering.

Directions in Painting MEZZOTINTO - PRINTS;
on Glasß, or without it.

CHAP. XXIII.

THis most ingenious way of Painting justly claims applause and admiration, if skill and dexterity are called to the performance: Where these two combine, beauty and perfection must dance attendance. Tis a pleasant, insinuating Art; which, under a pretty disguise betrays us into a mistake: We think a piece of Limning lies before us, but more strict enquiries will evince, that tis Mezzo-tinto at the bottom; Who can be displeased to be so innocently deluded, and enamoured at the same time? Tis female policy at once to ravish and deceive the eyes, and we not only carefs the cheat, but are in love with the impostor too. This manner of Painting is lookt upon to be the Womens more peculiar province, and the Ladies are almost the only pretenders; yet with modesty and submission I may adventure to affirm, that I have not had the good fortune to meet with one of an hundred, that had an excellent command of the Pencil, or could deservedly be stiled a Mistress of this Art; yet tis certainly no ungasie task to arrive to a great height in it: but we are overstockt with no less conceited than ignorant Teachers, well qualified to deface a Print, and spoil the colours, who abuse those young Ladies that desire instructions, perswading 'em to the damage of their purses, and loss of their time to attempt that which they are not able so much as to assist 'em in. This is a sufficient inducement to perswade my self, that these Rules will be acceptable; tho I know very well that I have raised a discourse on a subject with which the world is very well acquainted, yet by way of requital I shall make greater discoveries than the famous Mistress of it ever pretended to communicate; in a word, I promise to display it in its perfection.

I conceive tis requisite to advise you, first, in the election of Prints, Frames, and Glasß; of each in their order. Mezzo-tinto Prints are to be preferred before all others, being more fit and suitable for Painting than those that are engraved, for in these all the stroaks of the Graver are plainly visible; but the other, if done with a neat and careful hand, on a good, fine-grounded print, can hardly be distinguisht from Limning. Consider, that some of these Prints are of a coarse ground, others of a fine: the first are discernible, for they seem to be rough, and workt as it were with the pricks of a Pen; but the latter hath soft and fine shadows, like a piece neatly wrought in Indian ink, or a picture in black and white.

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Observe farther what paper they are drawn upon; for if it be too thick, which you may foresee by wetting a corner of it with water or your tongue, and it pass not through the paper presently, then conclude tis not for your purpose; but on the contrary, the thin and spongy paper must be elected: Their value is enhanced by the different size and goodness of each Print; some may be afforded for six pence or a shilling, others for 18d. or more.

Your Glafs ought to be thin, white, and well polisht, such as is made for Looking-glasses. All blewish, red, green, and window-glafs, cannot be allowed of here, you must altogether despise and cashier it; for if you paint on either of these, especially window-glafs, your colours can never appear fair and beautiful.

Your Frames for glafs-painting are usually made of stained Pear-tree, with narrow mouldings for little pieces, which increase in breadth, as the size of your picture does in largeness; they are made with Rabets, and are afforded for 6, 8, and 12 pence, or more, according to their several dimensions.

Another sort of Frames I recommend to you, most proper for those Prints which you paint without glafs, called Straining-frames: If you desire to have them Carved, Gilded, or black, order them to be made flat, and even, without a Rabet on the back-side, half an inch less than the edge of the Curt, every way; which is apt to rend when it undergoes the trial of straining. This mischance is occasioned by the sharp edge of the Plate, which almost cuts the paper when tis printed: If you approve of black Frames, command the Frame-maker to work them half round with Pear-tree; would you stain, or Japan them, guild or raise their carved work; this Book will sufficiently inform and direct you. Thus much of these things in particular; I shall now proceed to give a catalogue of such Colours as may be assistant to you in this business, together with the Oyls, and their several prices; as also directions to make drying Oyl, and various sorts of Varnish for Painting. And first, the names of your colours, and their value, as they are commonly sold ready-prepared; take in the very order that they are placed on your Pallet.

Flake White, finely ground in Nut-oyl, is sold at 2s. the pound. White-lead, ground in the same oyl, 1s. per pound.

Yellow and brown Oaker, finely ground in Linseed oyl, is vended for 3d. the ounce.

Yellow or Dutch Pink may be afforded, when ground, at the same rate.

Brown or glasing-Pink is indeed very dear, the bigness of a Nutmeg grinded will stand you in 6d.

Fine Lake will cost as much.

Light and brown Red, are only yellow and brown Oaker burnt; tis 3d. the ounce ready ground.

Italian Terravert, is not much used in this Painting, though very much in all others; tis dearer sometimes than at others.

Umber

Umber, Collins-Earth, Ivory, blew black, are afforded at the ordinary price when ground, which is 3d. the ounce.

Distilled Verdegreas ground, you may have at the same rate with Brown Pink and Lake; but these three colours I would advise you to purchase by the Ounce, and grind 'em your self, if it will stand with your conveniency; for the Colour-Grocers will afford these cheaper by the Ounce than Dram. Its price is 1s. the Ounce; indifferent brown Pink, and Lake, for the same value; but that which is more pure and fine, is 1s. 6d. 2s. and 2s. 6d. or more, as they excell in goodness.

Some Colours are in powder, which you must of necessity have by you, and should mix and temper on your Pallet, as you shall have occasion to use them.

The first is Vermilion, usually sold at 4d. the Ounce.

Carramine, being the finest and most excellent Red, is sometimes vended for 3l. the Ounce.

For Blews, the best fine Smalt is to be bought for 4 or 5s. the pound.

Blew Bice, useful only in making green colours, may be gotten for 4d. or 6d. an Ounce.

Ultramarine, the richest blew in the world, bears several prices: the deepest and best will cost 6 or 7 Guinea's, but then it must be extraordinary fine; other sorts are exposed for 3 or 4l. the Ounce, which is very good too, and fit for this use; some again for 20s. the same quantity, and may serve for Painting, but tis too coarse for glazing.

Yellow and pale Masticott, which is finest, free from greet, with the brightest colour, is the best. If it prove coarse, grind or wash it a little on a clean stone; tis sold for 2d. the Ounce.

Red Orpiment you must mix with drying Oyl; this too is afforded for 2d. the Ounce.

These are the Colours useful in Painting, with which you may exactly imitate and hit any colour whatsoever, by different ways and methods of mixture. Their price also I have given you, if you buy them in small parcels; but if you furnish your self with greater quantities at one time, you'll find the purchase more cheap, and easie. Observe, that six of these are transparent or glazing colours, viz. Brown Pink, fine Lake, Carramine, fine Smalt, Ultramarine, and Distilled Verdegreas.

To wash, or make any of the Powders very fine.

You must have four or five large Wine-glasses by you, and two or three quarts of clear water. Fill one of your glasses with it; put in half an Ounce, or as much of your colour as you intend to wash; stir it well about with your knife, permit it to stand no longer than while you could count or tell forty; for in this short space of time all the coarse will sink and settle to the bottom, the

finer remains floating in the water, which convey and pour off into another glass, leaving the coarse part behind. Let the vessel, with the fine colour and water, stand till next day, by which time that also will settle to the bottom of the water. This being poured off, take out the colour; place it on a clean smooth Chalk-stone, to soak and drink up the water; and when tis dry, paper it up for your business.

Of OYLS.

It remains, that to this account of Colours, we subjoyn that of Oyls, which must be serviceable to us in the Art of Painting.

The first of these is Linseed Oyl, sold at 8d. the quart.

Nut-Oyl, to be purchased at 16 or 18d. the like quantity.

Oyl of Turpentine is afforded for less than 8d. the pound.

Drying-Oyl, will stand you in 2d. an Ounce at the Colour-shops, and Fine-varnish 3d. which in my opinion is too dear; and therefore, if you'll give your self the trouble, I'll be at the pains to instruct you, how to make either sort.

To make the best Drying-Oyl.

Mix a little Letharge of Gold with Linseed-Oyl, for a quarter of an hour boil it; if you'd have it stronger, continue boiling it, but not too much neither, lest it prove over-thick and unserviceable.

Another more ordinary.

Bruise Umber and Red-lead to powder, mix 'em with Linseed-oil, and for boiling follow the directions foregoing. When this Oyl has stood a day or two, and you find a skin over it, know then for certain tis at your service.

To make Varnishes for these Prints, or Pictures in oyl.

Put an Ounce of Venice-Turpentine into an earthen pot, place it over a fire, and when dissolved and melted thin, add to it two ounces of oyl of Turpentine; as soon as they boil take off the pot, and when the varnish is cool, keep it in a glass-bottle. This and all other varnishes ought to be stopp'd close, and secured from the approaches and damage of the Air. With this you may varnish your Prints on glass or others, to render them transparent; this is what the Shops sell for fine varnish: should your varnish be too thick, relieve it by an addition of Oyl of Turpentine.

Another more excellent Varnish either for Pictures in oyl, or making Prints transparent.

Inclose six ounces of the clearest, white, well-pickt Mastick finely powdered, in a bottle with sixteen ounces of oyl of Turpentine; stop and shake them well together, till they are incorporated. Then hang the bottle in a vessel of water, but not so deep as to touch the bottom; boil the water for half an hour, in which space you must take

take it out three or four times to shake it; if you'd have it stronger, boil it a quarter of an hour more. I could give you a greater number of Recipe's, but 'twill be too irksome, tedious, and unnecessary, seeing these will preserve your pictures, and are as good in their kind as any Varnishes whatsoever.

CHAP. XXIV.

To lay Prints on Glass.

HAVING at large treated of the Colours, Oyls, and other materials required in this work; I proceed to instruct you how the Prints themselves must be laid on Glass. First therefore let your Prints be steeped in warm water flat-ways, for four or five hours, or more, if the paper be thick: provide then a thin pliable knife, with it spread Venice-Turpentine thin and even over the glass, and with your finger dab and touch it all over, that the Turpentine may appear rough. Next, take the Print out of the water, lay it on a clean Napkin very evenly, and with another press every part of it lightly, to suck and drink up the water of it; afterwards lay the print on the glass by degrees, beginning at one end, stroaking outwards that part which is fastning to the glass, that between it and the Print no wind or water may lurk and hide it self, which you must be careful of, and never fail to stroke out. Then wet the backside of the print, and with a bit of sponge or your finger rub it over lightly, and the paper will role off by degrees; but be careful, and avoid rubbing holes, especially in the lights, which are most tender: and when you have peeled it so long, that the Print appears transparent on the backside, let it dry for two hours; next, varnish it over with Mastick or Turpentine-varnish four or five times, or so often, till you may clearly see through it. After a nights time for drying, you may work on it.

To lay Prints, either graved, or Mezzo-tinto's, in such manner, that you may role off all the paper, and leave the shadow behind.

Soak the Print in water, dry it with a cloath, spread on the glass oyl of Mastick: and some Turpentine, and lay on the print upon it, exactly as before. When tis almost dry, brush off the paper with a brush, and you'll find none but the inky, shadowed part remain: then do this as the former with Mastick-varnish, which preserve dry and free from dust, until you are at leisure to paint upon it.

To prepare Prints without glass, or straining-frames.

When your prints are steeped sufficiently in water, lay them on a smooth, wet Table, with the print-side downwards, and rub 'em thin as before for glass. Next, with common paste, do the backside of your frame, and paste on your print while wet: give it leisure

sure to dry, and then varnish it on both sides four or five times with Mastick or Turpentine-varnish, until tis so transparent, that you may see the Picture as plain on the back as fore-side. Lastly, allow it a day or two for drying.

Of the posture and position of the Prints, and those that paint them.

I may now very reasonably suppose, that all things are in readiness, and that nothing may hinder us from setting about the work in earnest. Most Ladies that have practised this Art have made use of an uneasy posture for themselves, and a disadvantageous situation for their piece: for they generally stand to it when the windows are high, against which they place the Print; but whosoever stands, cannot so steddily move the hand and pencil as the person that sits down. I advise you therefore to a Table Hessel, very like to, and not improperly called, a Reading-desk; only with this difference, That where the Panel or back-board for the book is, there our Painting-desk may be all open, with three or four wiers pendant-wise, to keep the picture from falling through, and a narrow ledge at the bottom to support it. Beside these, I would have little holes made equally distant on both sides of the Desk, as tis remarkable in Painters Hannels, that by pegs or pins, and a narrow ledge laid upon them, I may raise my Picture higher or lower, as it best suits with my conveniency. Being thus fixt, lay a sheet of very white paper behind the picture on the table, and you'll find it much better, and more conveniently placed than against the window.

How to paint a Mezzo-tinto-Landskip on Glass, or otherwise.

The first thing to be attempted in this work, whether Landskip or others, is Glazing all those places that require it; and if you desire they should lie thin, and drie quickly, (as they ought to do,) mix varnish when you lay them on, and in four hours time they'll be ready for the reception of other colours. In Landskip, you should first glaze the nearest and great trees, and ground 'em with brown Pink, or, if you fancie them greener, add distilled Verdegreas. The trees, that are to appear with a lively, beautiful green, as also the leaves and weeds, that are in some pictures, must be glazed with Dutch-Pink, and distill'd Verdegreas; the trees farther off, with Verdegreas alone; the hills, mountains, and trees, at the greatest distance of all, remember to glaze with fine Smalt, a little Lake, and Verdegreas, all thinly mixt with varnish. As for the Skie, although several Mistresses practise and teach the cutting of it out from the picture, and painting it on the glass, I do by no means allow of it, for it agrees not with the eye, but makes that part which should seem more distant, appear too nigh and before the rest; in a word, it spoils and disparages the whole piece. I cannot suggest to my self any reason for this foolish contrivance, unless

a sense of their inabilities to paint 'em beautifully, obliges them to commit so great an absurdity. Take then Ultramarine, or, for want of that, fine Smalt; mix it thin with varnish, and glaze it over two or three times with a clean large Pencil, and a very swift stroak; for if you're tedious, it will dry so fast, that you cannot possibly lay it even. If the Landskip be adorned with Figures, Buildings, Rocks, Ruins, or the like, they require finishing first of all. The mixture of colours for these things consists chiefly of white, black, and yellow, sometimes a tincture of red; but the management and composition of them I leave to your inclination, fancy, and experience: yet I would have you consider, that all your Colours for this sort of Painting ought to be extraordinary light. Now to finish the Trees, Ground, and Sky, and the rest of the picture, begin as before with the greatest or nearest trees, and with yellow Pinke and white, paint over the lightest leaves; but with a darker colour of Pink, and a little Smalt, do neatly over the darkest and outward leaves with a small pencil dipt in varnish. Those trees you would have beautiful, paint with a mixture of yellow Masticott, Verdegreas, and white; the darker parts with Pink, Verdegreas, and white; as those trees also which you glazed with Verdegreas only, they being mixt very light with white. But to finish the skie and foreskip; if any clouds appear, touch them with varnish and light colour, made of white, yellow Oaker, and Lake: With these likewise touch the lightest parts of hills, and towns, at the remotest distance; then mix Smalt and White as light as you can conveniently, and paint over the skie; add to these a tincture of Lake, and do over the darker clouds: Let your colours lie thin, and even; if the whole be finished, grant it time to drie in. If you would have your Picture look more strong, brisk, and lively, set it against the light, or on the Hesel as before; and although tis painted all over, you may perceive the shadows and lights through it; if not, what you painted before will guide you. Paint then your skie and foresight with the same but lighter colours than before, and so every thing else respectively.

CHAP. XXV.

To Paint a piece of figures, as Men, Women, &c.

IN painting a Face, the first thing required is, if there are any deep shadows, to glaze and touch them thinly with Lake, brown Pink, and Varnish; also the white speck and black ball, or sight of the eye, as the Print will direct you; the round white ball of a convenient colour too. If you make the lips of a delicate red, glaze them with Carramine, or Lake: For the rest of the face, begin with the dark side, and paint the shadows with a colour more

red than ordinary, for which Vermilion, yellow Pink, and white, are most proper; where note, that all varnish is forbid in painting flesh-colours, except what is used in glazing the shadows: if you should mix varnish, the inconvenience will be, that the colours will drie so fast, that you cannot sweeten the shadows with the flesh. Then give some touches on the strongest lights of the face, as the top of the nose, forehead, and by the eyes, mouth, and chin, with a colour made of white, pale Masticott, or yellow Oaker, and a little vermilion, and mixed according to the complexion intended; then mix that colour a thought darker, and lay it on all the face, that was not painted before, very carefully; yet for the mouth, and cheeks, somewhat redder. Next, with a fine clean pencil, that has been used and worn a little, hatch and sweeten all your flesh-colours and shadows sweetly together, cleansing the pencil as often as tis requisite. Cheeks too pale, or any other part, may be regulated with suitable colours, whilst the piece is moist and wet. For swarthy complexions, mix the flesh-colour with white, yellow or brown Oaker, and light red, with shadows agreeable. I request you to observe the same method in painting breasts, hands, or naked bodies, as for the face: When any of these are drie, you may go over them again, by which second painting you may effectually mix your colours to your humor. Lastly, be ever careful, that your pencil be steddily guided, without the least slip or trespass upon lines and features of a disagreeing colour.

To Paint Hair.

Tis not convenient in this Painting to use Varnish or Colours neer so dark as the life, for the Print will darken it: as for example; Suppose I were to paint an head of hair that is black, I would mix white, black, red Oaker, with a touch of Lake or light red, all which may produce an ash-colour; and the hair or Peruke being coloured with it, will represent a natural black. Now to make the curls shew stronger, touch the lightest parts with a lighter colour, and the darkest with the contrary; all which you may see through, if they are not laid too thick.

To paint Drapery or Garments.

To paint a piece of Drapery or Cloath, of a broken colour, you must take care of its mixture; yet you are to make three degrees of the said colour, that is one, the very colour, another more light, the third darker: this last is for the darkest folds, the lightest for the lightest pleats, and the colour between both for the other part of the garment; sweeten the colour with a worn pencil, that the folds may not lie hard. If you have a mind to embroider a garment, make fringe, or any other parts with shell or powdered Gold or Silver, mix then your metals with gum-water, and with a
fine

fine pencil hatch or embroider your flowers, and touch the fringes, or what else best pleases you, before you either glaze or paint the garment you design to adorn, after this manner.

How to paint changeable Drapery.

Imagine that your garment to be painted had its ground purple, and the lights yellow; take then a fine pencil dipt in varnish, and with yellow Masticot touch thinly all the lightest parts of your folds; if there be occasion repeat it, for your colour must be very thin with varnish: when drie, glaze it all over with Lake and Ultramarine, or Smalt with varnish once or twice, and let it drie; then mix three degrees of a purple colour, one of Lake, Smalt, and White, and lay them on, as the last Paragraph directs you.

To paint several sorts of Red Drapery; and, first, of the Finest.

Take Carramine, and mix it thin with varnish alone; glaze over your garment once, if you'd have it very beautiful, two hours after do the same again; and when that is drie, with vermilion and white, or vermilion only, you may paint all except the dark shadows, which should have red. If you can see through the colour when drie, the lightest folds, touch them over with clear white, and they will appear more rich and ornamental.

Another Red near the same.

Grind Lake very finely in oyl, temper it well with drying oyl and varnish; with this glaze over your Drapery two or three times, and when tis dry, paint the lightest with white, the darkest with light or brown red, the remainder with vermilion.

Other Reds more ordinary, without Glazing.

Mix vermilion and white, and paint the strongest lights with it; the dark shadows with a light or dark red, and the rest with vermilion. For the lightest folds, mix light red and white; for the dark pleats, brown red; for the rest, light red only.

To paint the best Blew, and glaze with Ultramarine.

Mix Ultramarine with thick Nut-oyl; but if you cannot wait and attend its drying two or three days, then instead of oyl use varnish, and glaze your garment three or four times over, letting it dry between every turn; when tis dried, make three degrees of Smalt and White very light, and with the clearest white do the lightest folds, and the rest as directed in the other colours. If you are unwilling to bestow Ultramarine upon it, you may after the same method glaze with fine Smalt, and varnish it as often as with the former, and paint it with White and Smalt: An indifferent Blew is made with White and Smalt, mixt in several degrees without glazing.

To glaze and paint the best Purple-Drapery.

Glaze the garments thin, once over with Carramine, or Lake; when tis dry, paint it every where with Smalt and White, lighter or darker as you think best, but let the lightest folds have still a colour more light than the rest. Contrary to this you may produce a purple, by glazing your work over once or twice with Ultramarine, or Smalt, and paint it with Lake and White.

Purple without glazing.

Make a mixture of Lake, Smalt, and White, with which paint the Drapery, heightning and darkening the folds as in the other Receipts.

Yellow Drapery.

For your lightest folds, mingle yellow Oaker, and White; and brown Oaker for the shades: if that is not dark enough, Umber will make it so; but do over the other pleats with yellow Oaker. Such another colour may be made with White, yellow and brown Pink.

To paint the most beautiful Yellow.

Glaze your Drapery, or any thing you would have lovely, with brown Pink once or more, and the darkest parts oftner; after tis dried, touch the lightest folds with pale Masticott, the next with yellow Masticott: if some require a colour darker than that, mix yellow or brown Pink; but for the faddest of all, use yellow Pink and a little Umber. When tis drie, you may paint all with white, except the shades.

To finish, varnish, and polish Pictures, that are not laid upon Glase.

These desire the same proceedings with those on Glase, unless you have a mind to adorn Embroidery, Fringe, or the like, with Gold or Silver. Touch then the forside of your picture with shell-gold in gum-water; or else, after you have varnished it two or three times with varnish made of Spirit, take Japan gold-size, with which hatch and lay it over with gold-dust; and if your judgment and experience will allow of it, you may touch and heighten all the strongest lights, and deepen your shadows too on the foreside, which gives so much life to it, that Limners themselves have been deceived, and mistook it for a piece of real painting. I desire young beginners to forbear, and not attempt this way of finishing, till experience and practice shall give them encouragement. If you design to varnish and polish any of these Prints, lay on the colours without skins, and very even on the backside, and permit them to drie at least a week (for the longer the better) before you offer to varnish them after this following manner.

To

To varnish these Prints, or other Pictures, without polishing.

Take of the best white Japan-varnish, and an equal quantity of Varnish made of Mastick and oyl of Turpentine; into these mingled together, dip a fine Camels-hair-brush, and with it varnish over your piece, four or five times carefully by the fire, as you are taught to do Japan; and you'll find that it gives a very rich gloss.

To varnish pictures, and polish them, like Japan.

With white-Japan-varnish only wash over your work five or six times, observing all the method for Japan directly. When it has rested three or four days, lay the Picture on the Cushion, whereon you cut the Leaf-gold: then with Tripole and water polish it; and lastly, clear it up as you do White-Japan.

These are the Rules in short, I thought fit to lay down in the treatise of this pretty Art; and I question not but they are full, most exact, and satisfactory, and will be found so, when the Ingenious Ladies shall put them into practice.

To Imitate and counterfeit

TORTOISE-SHELL and MARBLE.

CHAP. XXVI.

BEfore Japan was made in England, the imitation of Tortoise-shell was much in request, for Cabinets, Tables, and the like; but we being greedy of Novelty, made these give way to modern Inventions: not, but that tis still in vogue, and fancied by many, for Glass-frames, and small Boxes; nay, House-Painters have of late frequently endeavoured it, for Battens, and Mouldings of Rooms; but I must of necessity say, with such ill success, that I have not to the best of my remembrance met with any that have humour'd the Shell so far, as to make it look either natural, or delightful. But, to avoid all reflections, I must attribute this to that mistaken piece of frugality in them, who think, if they can agree with a Painter by the greatt, their business is done; for by

these means, they not allowing the Artist a Living price, he cannot spend both his oyl and labour, nor stretch his performances to the utmost extent of his skill. On the other hand, some there be who are indeed willing, but not being Masters of what they profess, sink and come short through their inabilities. I believe the complaint is universal; the ingenious and most excellent in each profession, being destitute of a reward that is answerable and proportioned to the worthiness of his undertaking.

But tis high time that we close with the business in hand. And first, the Tortoise-shell, I propose for your imitation, is that which is laid upon Silver-Foil, and is always made use of for Cabinets and Boxes, for it gives life and beauty to the Shell, which else would appear dull and heavy. Now to counterfeit this very well; your wood ought to be close-grain'd, smooth, and cleanly wrought off, as Pear-tree; but if it be a coarse-grained wood, as Deal, Oak, or the like, you must prime it with Whiting, as you have been taught in the chapter of black Japan for coarse-grained woods. When either of these are rushed smooth, as is required; take a fit varnishing tool dipt into a gallipot of the thickest of your Seed-lac-varnish, and wet with this varnish the breadth of a Silver-leaf, which you must take up with cotton, and clap on it whilst tis moist, dabbing it close to the work, as you have been taught in Guilding. This done, wash again, and lay on another leaf of Silver, ordering it as before, and so continue, till the whole is so overspread with Silver. When tis through drie, with a fine hair-brush sweep off all the loose Silver. Next, grind Collins-earth very finely on a grinding-stone, mixed either with common size, or gum-water; this I esteem better than Lamblack, because Collins-earth comes much nearer to the colour of the Shell: Being finely ground, mix it with more common size, or gum-water, as you have made use of either in the grinding. With this spot the darkest of your Shell, striving to the utmost to imitate it as nearly as tis possible; and in order hereunto, I counsel you to procure a piece or more of the true, right Shell, that hath much variety in it; this lying by you, will quicken and assist your fancie, and enable you to perform it with much more ease and cunning. You may observe, (when this is done, that several reds, lighter and darker, offer themselves to view on the edges of the black, and sometimes lie in streaks on the transparent part of the shell: To imitate this, you must grind Sanguis Draconis very fine with gum-water; and with a small pencil draw those warm reds, flushing it in and about the dark places more thick, but fainter, thinner, and with less colour towards the lighter parts of the shells; sweetning it so, that by degrees it may loose its strength of red, being intermixt with, and quite lost in the silver, or more transparent part. Tis worthy your observation, that those who are expert and ready at spotting or working this imitation, do usually grind the forementioned colours drie and
very

very finely upon a stone, and mix 'em with fine Lacc-varnish as they work them, which is most agreeable and proper, as I have noted before, being not so apt to polish off as Size or gum-water; notwithstanding, I advise young beginners to use size or gum-water, for I suppose they are not able to do it so well, that it should not require a review and correction; for then they may with ease and a little care rub out any faulty place, and go over it again, until tis done artificially, (but this convenience is not to be had, if you imploy Lacc-varnish at the first.) When this is done, and dried, give it six washes of your Seed-lacc-varnish; let it rest one day; after which time rub it gently, till tis smooth and fit for the second operation: in order to which, grind Dragons-blood and Gambogium, in an equal, but small quantity, very finely; put them into as much Seed-lacc-varnish as will wash it six times more: permit it to stand twelve hours, and then allow it the third varnishing, and with the last mixture wash it so often, till your silver is changed into gold, or a colour like it. Note, that your first washings may be with the coarse, the two last with the fine and clearest of your Seed-lacc-varnish; avoid making your varnish too thick and high coloured with Gambogium, and Sanguis Draconis, but heighten it by degrees, otherwise your silver will be too high coloured, before you have given it a sufficient body of varnish. When it has stood two days, polish and clear it up, as you have been instructed in the treatise of black varnishing.

Another way to counterfeit Tortoise-shell.

First, prime, lacker, and size your work in oyl very thin, as you are taught before in the Art of Guilding, and when your silver is laid on and dried, let these colours be ground fine and thick in drying-oyl, placing them on your Pallet; they are, burnt Umber, Collins-earth, brown Pink, and Lake. Do over your work with Turpentine-varnish, and whilst it is wet, mix brown Pink and Lake thin with varnish; and lay all your faintest clouds or spots, which you may soften very sweetly, seeing your varnish is moist. After three hours standing, or longer, if the colours are drie, with a large, soft Tool, pass it lightly over; and again wetting it, lay in your clouds more warm and dark with Umber and Collins-earth, before tis drie; always observing the life, and sweetning your work, which is blending and mixing two colours after they are laid, so that you cannot perceive where either of them begin or end, but insensibly join with each other. If the clouds are not dark enough, repeat the varnishing and clouding once more, where tis required. When tis well dried, glaze it two or three times with brown Pink, yet a little tincture of Verdegreas in it will not be amiss; if you had rather, you may varnish it with Lacc-varnish, and finish it as you did the former.

Y^e end of the first part of the To

Whiten and prepare your wood in all respects as you do for white Japan; and after you have done it over with flake white, or white-lead, if you design a white with some veins, use some Vine-black, (which is made of the cuttings of Vines burnt and grinded,) mix two or three degrees of it with white-lead and a very weak size being warmed, until you have produced the intended colour for the clouds and veins of the Marble. Being thus far advanc't, call for a large, clean brush, wet your piece over with water, and before tis dry, with a great Camels-hair-pencil, dipt in the palest thin mixture, flush or lay the faintest large clouds and veins of your Marble, which being laid on whilst the work is wet, will lie so soft and sweet, that the original will not exceed it. Then if your work be not too drie, take a smaller pencil, and with a colour one degree darker than the first, touch all the lesser veins and variety of the Marble: If your work drie too fast, wet it again with the brush and water, and lay not on your colours when the water is running off, lest they bear it company. Lastly, take a small-pointed feather, and with the deepest colour touch and break all your suddain or smaller veins, irregular, wild, and confused, as you have them in the natural Marble. After a days drying, cold-clear it, that is, do it over with Isinglass or Parchment-size; and then varnish, polish, and clear it up, exactly in all things according to the directions for white Japan, to which places, and others above mentioned, we refer you. By mixing other colours this way, any sort of Marble is subject to your imitation; and, if neatly done, well polisht, and varnishd, will not only exceed any Marbling in oyl, but will in beauty and gloss equal the real stone.

CHAP. XXVII.

*Of Dying or Staining Wood, Ivory, &c.**To Dye Wood a beautiful Red.*

Woods, that are very white, take this dye the best of any: set a kettle of water boiling with a handful of Allom, cast your wood into it, permitting it to boil a little; that done, take your wood out, and put into the said water two handfuls of Brasil wood, then return your wood into the vessel again to boil for a quarter of an hour, and tis concluded. When dry, you may rush and polish it, or varnish it with the tops of Seed-lace-varnish, and polish it; by which management, you will find the wood covered with a rich and beautiful colour.

To stain a fine Yellow.

Take Burr or knotty Ash, or any other wood that is white, cured, and knotty; smooth and rush it very well, and having warmed it

it, with a brush dipt in Aqua fortis wash over the wood, and hold it to the fire, as you do Japan-work, until it leaves smoking: when dry rush it again, for the Aqua fortis will make it very rough. If to these you add a polish, and varnish it with Seed-lace, and then again polish it, you'll find no, outlandish wood surpasses it; for the curled and knotty parts admit of so much variety, being in some places hard, in others soft and open-grained, to which Aqua fortis gives a deeper colour, than to the harder and more resisting parts. In short, you'll perceive a pleasing variety interwoven, beyond what you could imagine or expect. If you put filings or bits of metals, as brass, copper, and iron, into the Aqua fortis, each metal will produce a different tincture: the best French Pistols are stocked generally with this sort of wood, and stained after this manner.

To Dye or Stain Woods of any colour, for Inlaid or Flower'd work, done by the Cabinet-makers.

Use the moistest horse-dung you can get, that has been made the night before; through a sieve or cloath squeeze out what moisture you judge sufficient for the purpose, convey it into several small vessels fit for the design; in each of these dissolve of Roach-allom, and Gum Arabick, the bigness of a nutmeg, and with them mix reds, blews, greens, or what colours best please you, suffering them to stand two or three days, yet not without often stirring them. Then take your woods (of which I think Pear-tree is the best if't be white,) cut them as thick as an half-crown, which is in all reason thick enough for any Fineered or Inlaid work, and of what bredth you please; making your liquors or colours boiling hot, put the wood into it, for as long time as will sufficiently colour them; yet some must be taken out sooner than the rest, by which means you'll have different shades of the same colour; for the longer they lie in, the higher and deeper will be the colours: and such variety you may well imagin contributes much to the beauty and neatness of the work, and agrees with the nature of your parti-coloured flowers.

To Dye or Stain Wood Black.

Take Log-wood, and boil it in water or vinegar, and whilst very hot brush or stain over your wood with it two or three times; then take the Galls, and Copperas, well beaten, and boil them well in water, with which wash or stain your work so often till it be a black to your mind; the oftner it is layed, the better will your black be: if your work be small enough, you may steep it in your liquors instead of washing it.

The best Black Dye for Ivory, Horn, Bone, &c.

Put pieces of Brass into Aqua fortis, letting it stand till tis turned green, with which wash your Ivory (being polished) once or twice. Next, boil Logwood in water, into which put your Ivory, whilst tis warm, and in a little time it gives a fine black, which

you must now rub and polish again, and twill have as good a gloss and black as any Japan or Ebony.

If you desire any foldage, flowers, or the like fancies should remain white, and of the same colour with the Ivory; draw them neatly on the Ivory with Turpentine-varnish, before you stain it; for those places which you touch with the varnish, are so secured by it, that the Dye cannot approach or discolour them. After tis dyed, if you can hatch and shadow those fancies with a Graver, and fill the lines by rubbing and clearing up the whole with Lamblack and Oyl, it may add much to its ornament and perfection.

To Stain a Green colour on Wood, Ivory, Horn, or Bones.

First, prepare either of them in Allom-water, by boiling them well in it, as you were just now instructed. Afterwards grind of Spanish-green, or thick common Verdegreas, a reasonable quantity, with half as much Sal-Armoniack; then put them into the strongest wine-vinegar, together with the wood, keeping it hot over the fire till tis green enough: if the wood is too large, then wash it over scalding hot, as in the other instances.

To Dye Ivory, &c, Red.

Put quick-lime into rain-water for a night; strain the clear through a cloath, and to every pint of water add half an ounce of the scrapings of Brasil-wood: having first boil'd it in Allom-water, then boil it in this, till tis red enough to please you.

Thus, Courteous Reader, are we at length arriv'd at our desired Port: Our Performances have been no way inferiour to our Promises. What we engaged for in the beginning, we have punctually accomplisht; and nothing certainly remains, but that you convert our Precepts to Practice; for that will be the ready way to examin, and try, whether they are false or insufficient. We have all along been directed by an unerring Guide, Experience; and do therefore advise you, upon the least miscarriage, to make a diligent review, and doubt not but second thoughts will convince you of too slight an observance. We desire you'd be as exact and regular in your performances, as we have been in ours; for by these means, Satisfaction will attend both Parties, all our designs must succeed to our wish, and our Labours shall be crowned with success and reputation.

F I N I S.

The Lid of a Powder Box



The Lid of a Patch Box



The Fellow to it



The Fellow to it





The Dove



The Dove

The Fallow



The Fallow



Other patterns for Powder Boxes.

Other Patterns for Patch Boxes 3



The fellow to it



The fellow to it





Cloth
Brushes

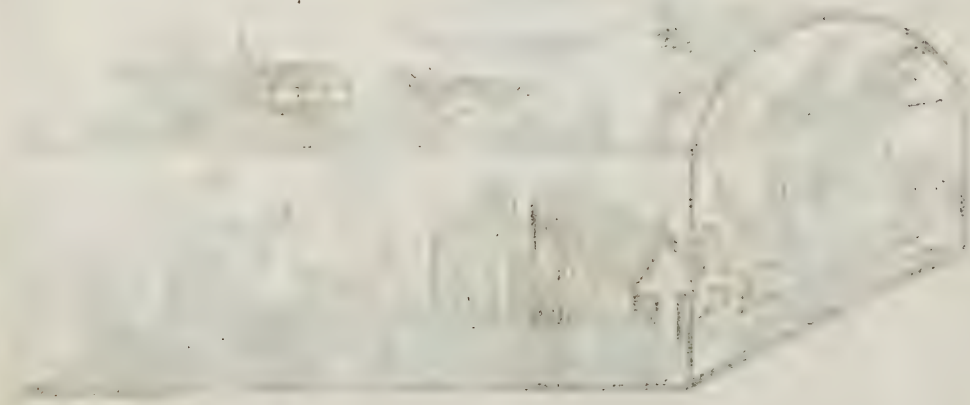


Combs
Brushes

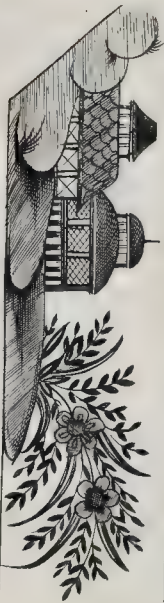


A Pinewhing Trunks for Pendants Necklace Rings & Jewells~





The top of a 12 inch Frame for a Looking Glass for Japan Work



The Bottom of y Sai frame



The Side of y fram on y Right hand



The Side of y fram on y Left hand



The top of a half Rōm frame for Japan worke called a 10 Inch Dyeing frame for a
dyeing cloth.



The Bottom of y^e said frame



The Side of y^e frame to y^e Right hand



The Side of y^e frame to y^e Left hand



1874

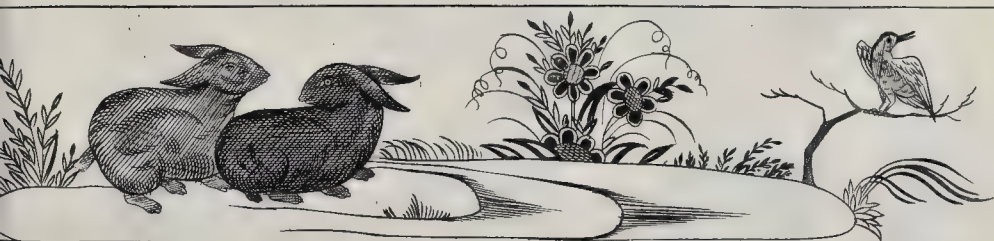
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The Fore Side of y Standish



For y Combe Box
 1 Combe Box



The fore Side of y Combe Box







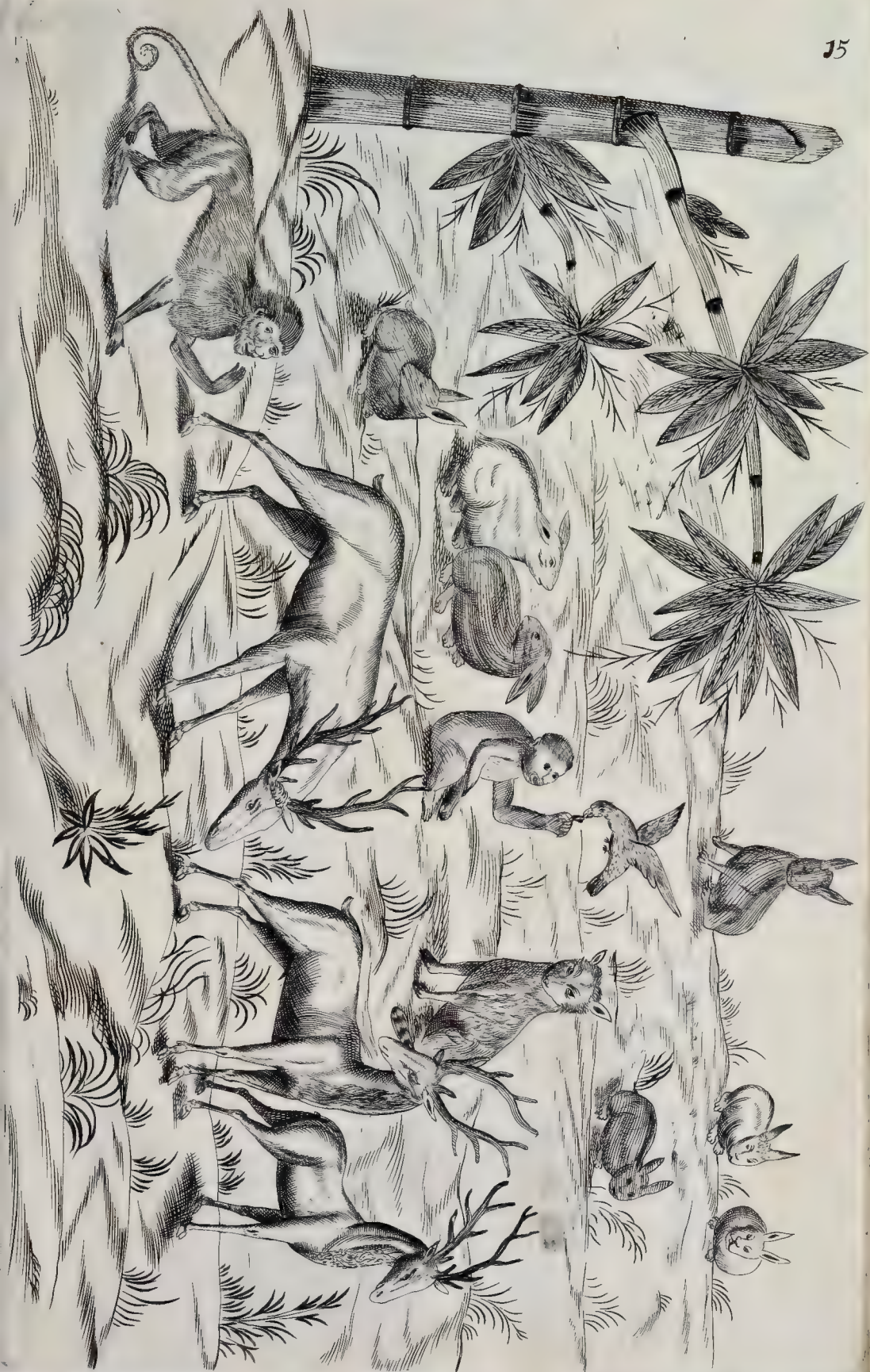












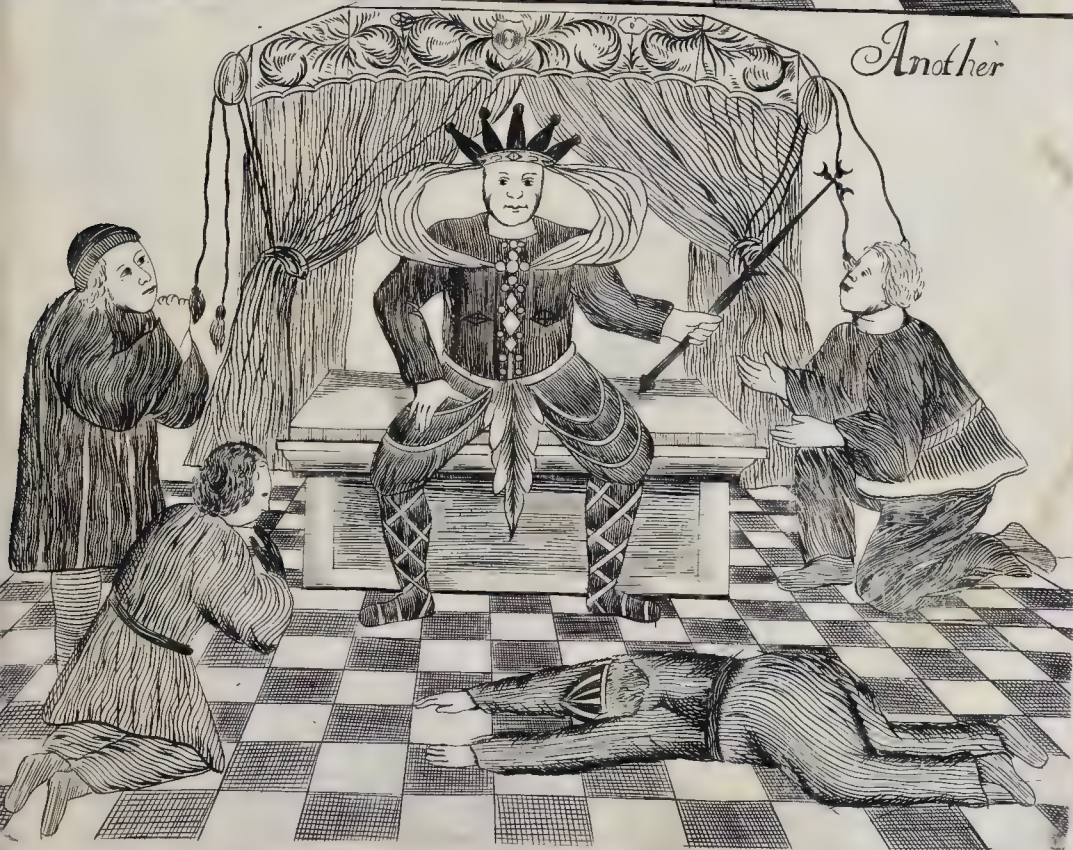
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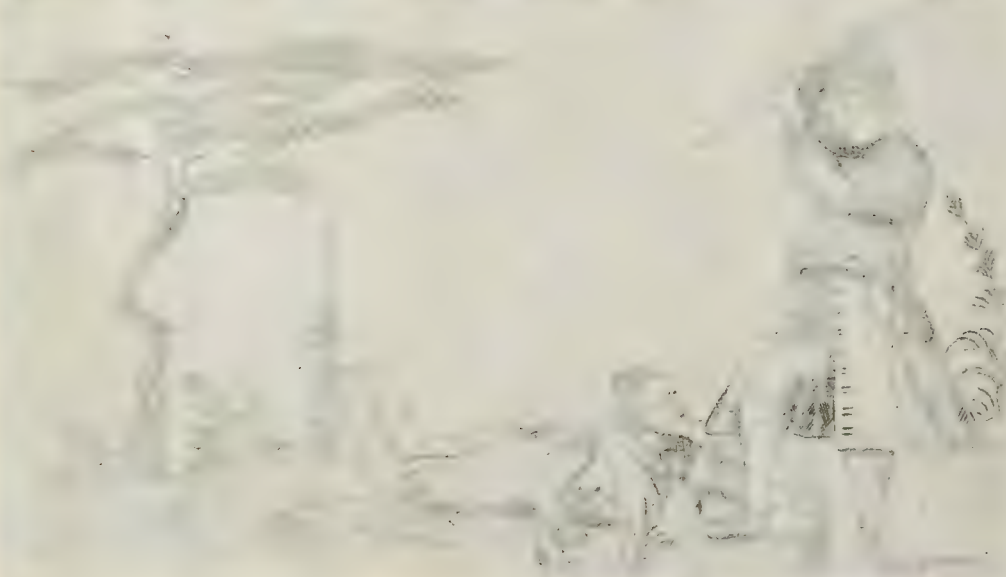
*A Pagod Worshipp
in y Indies*



Another



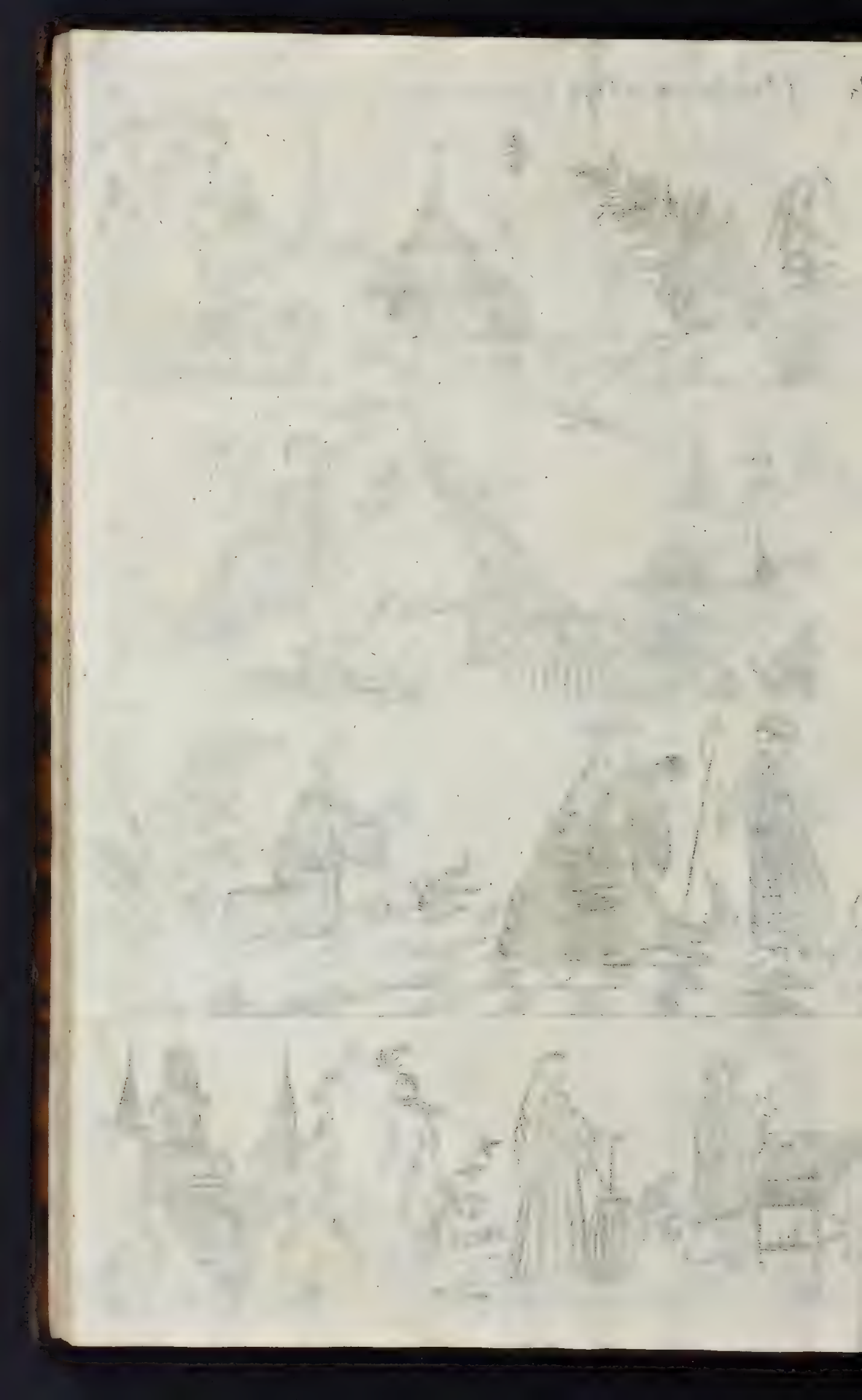




of Drawers som are Deepe & som more narrow of y^e same Cabbinett

19











An Embassy









1583

